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Special Libraries, November 1977

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special libraries

November 1977, vol. 68, no. 11

- ☐ Catalog on Microfiche
- ☐ Measuring User Satisfaction
- ☐ Citation Analysis in the Fine Arts
- ☐ Social Science Data Base
- ☐ Procedure Manuals

SPLBAN 68 (11) 375-424 (1977)
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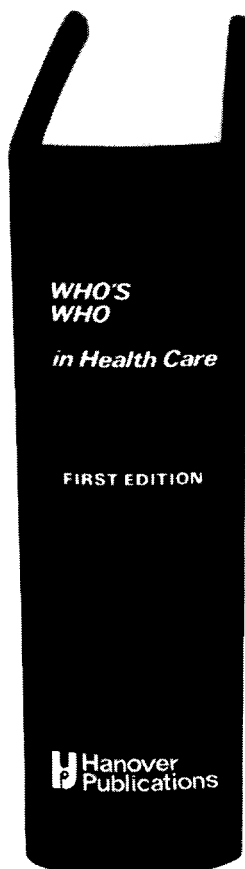
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Editor: NANCY M. VIGGIANO

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Advertising Sales: CARYN S. KATZ

Circulation: FREDERICK BAUM

Special Libraries is published by Special Libraries Association, 235 Park Avenue South, New York, N.Y. 10003. Monthly except double issue May/June. Annual index in December issue.

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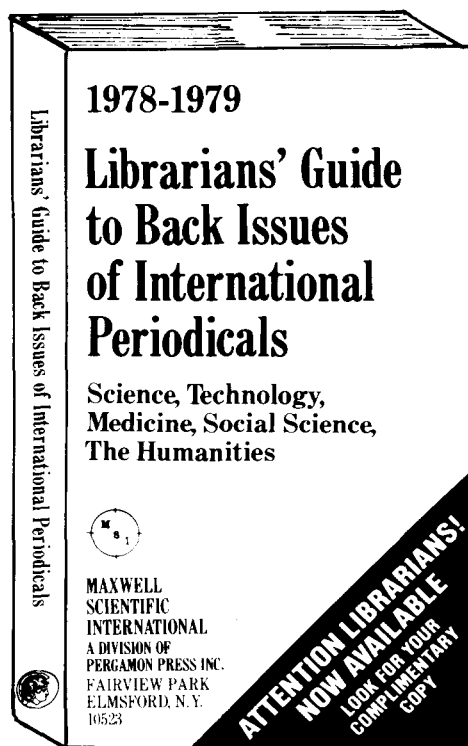
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Subscription Rates: Nonmembers, USA and Canada, \$22.50 per calendar year; add \$2.50 postage for other countries. \$7.50 to members, which is included in member dues. Single copies (recent years) \$2.75 except for October issue (Directory) which is \$12.00.

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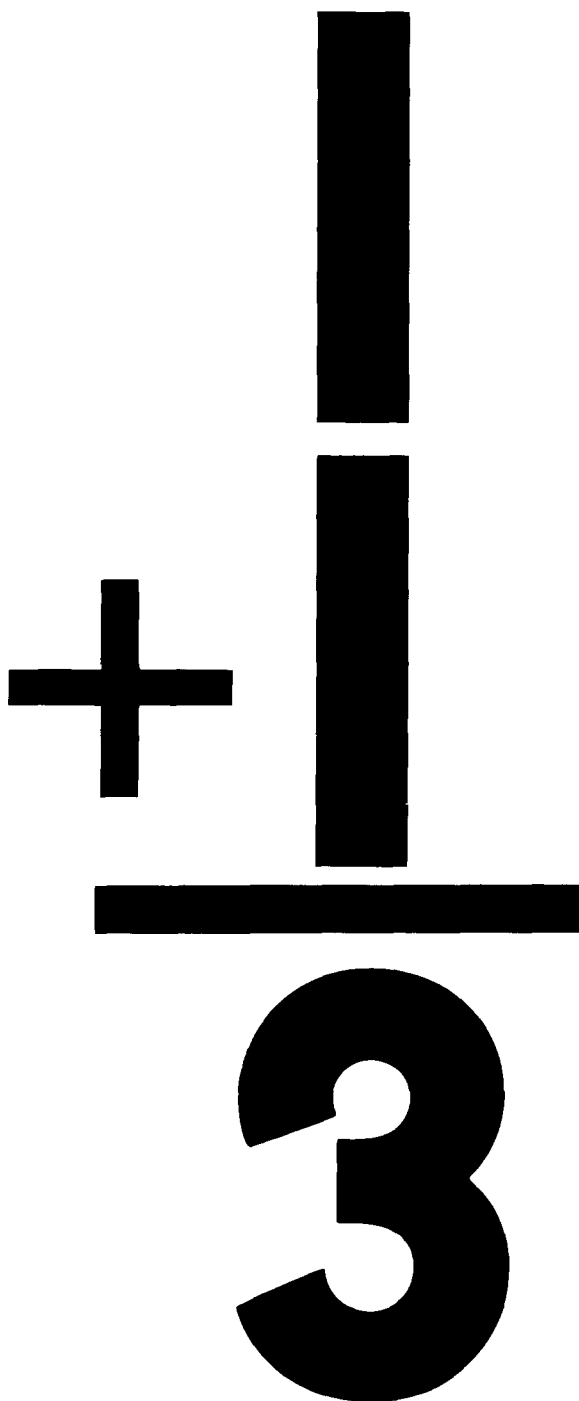
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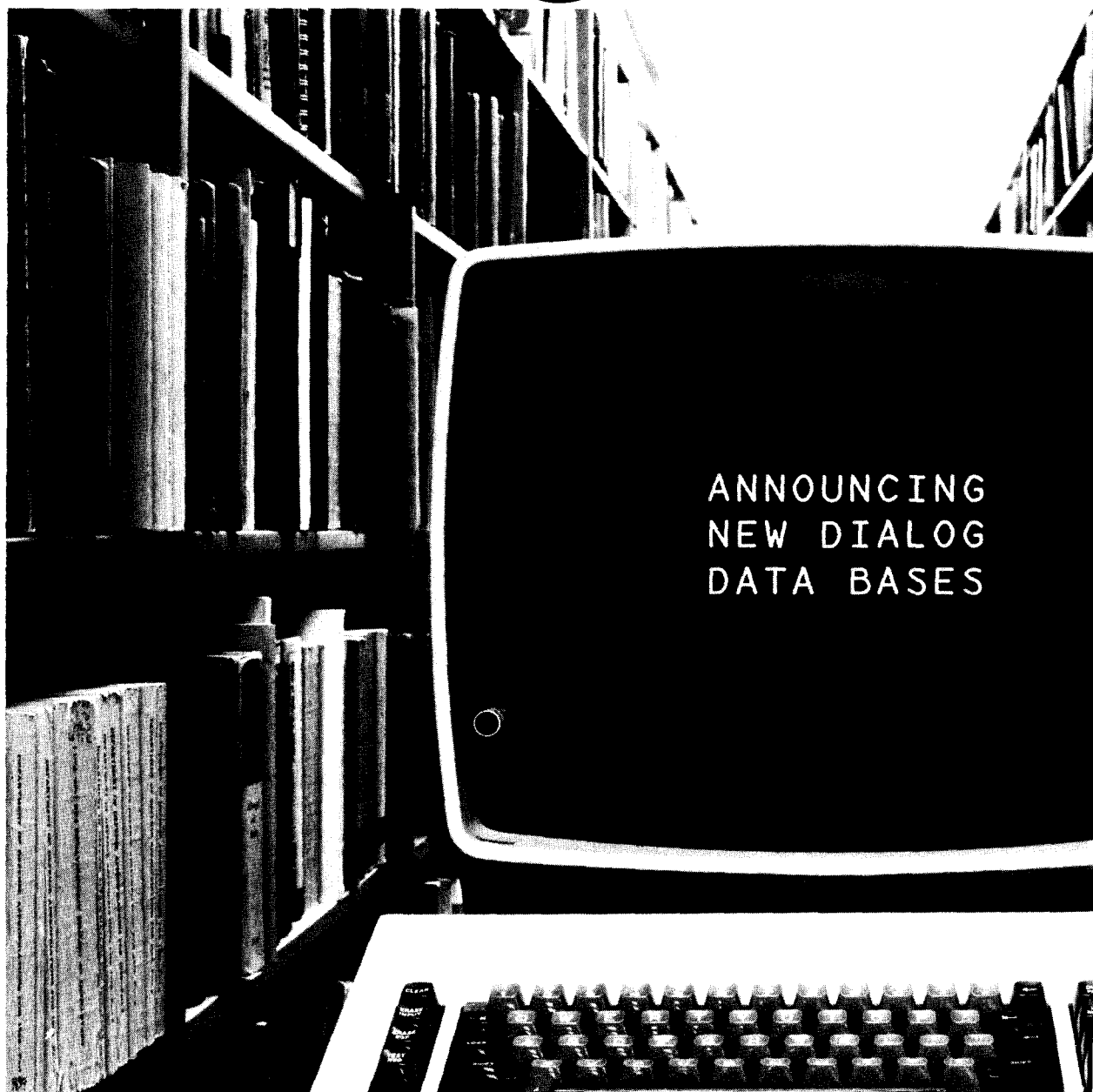
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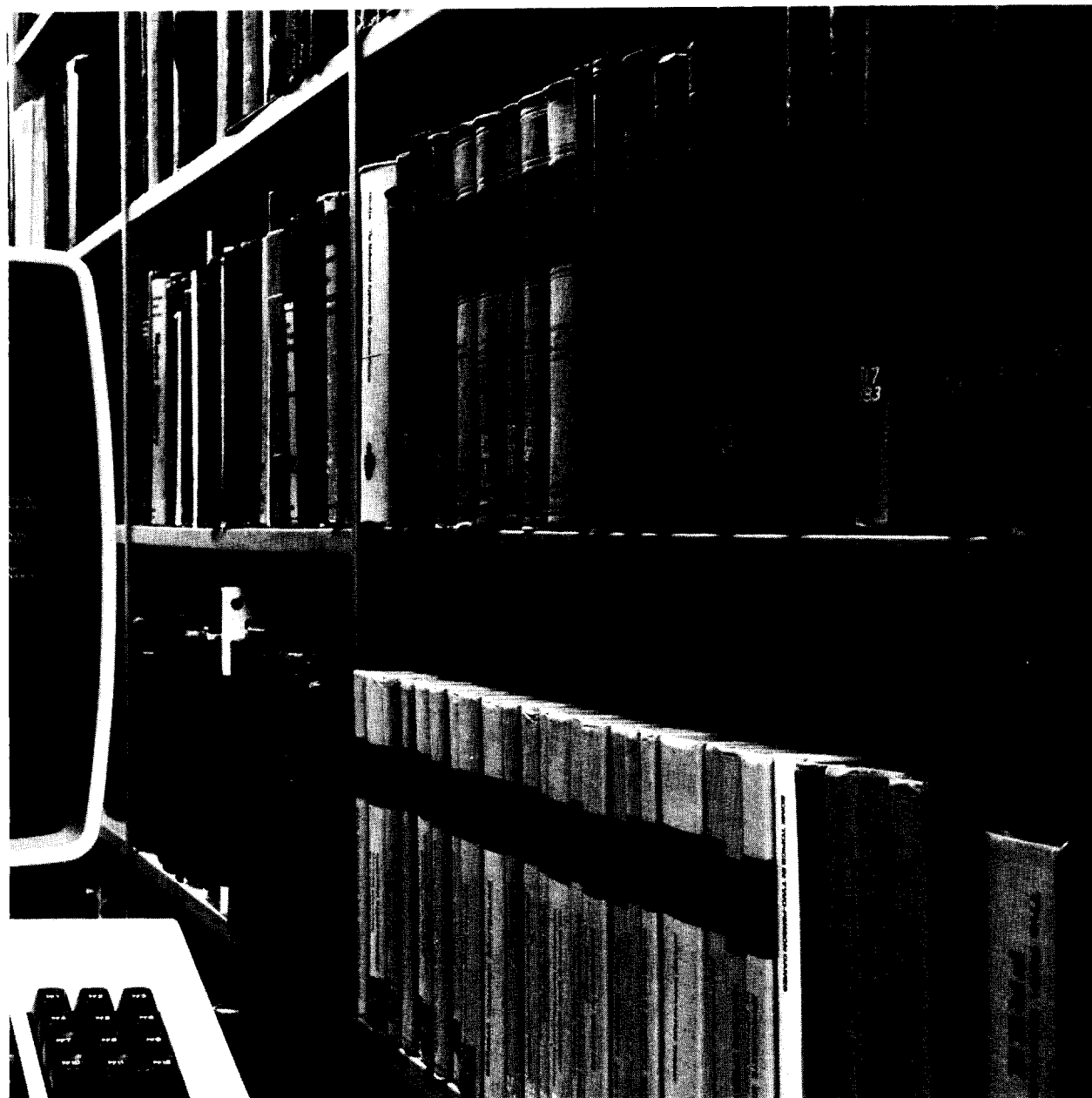
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Any librarian, scientist, or researcher who has been bewildered or frustrated by the thousands of letters and numbers used to identify technical documents will find the *Dictionary of Report Series Codes* most valuable. Compiled by computer methods, 25,000 technical report series codes are related to the various agencies of the Department of Defense, the Atomic Energy Commission, their contractors (including industrial, educational, and professional organizations), agencies of the United States government, and similar agencies of foreign governments. A second alphabet of agencies gives the codes they use.

The Introduction describes the development, assignment, and components of report numbers. Also included are explanatory notes for using the *Dictionary*, a glossary, lists of abbreviations and sources, and detailed reference notes on the peculiarities of numbers assigned by many agencies.

Business and Industrial Libraries in the United States 1820-1940

Anthony T. Kruzas

1965/hardcover/144 pages/6 x 9 1/4 /\$8.00/LC 65-19781/ISBN 0-87111-148-9

This volume uses company libraries as the thematic center to trace the history of the special library movement in the United States. Two aspects of library service for business and industry are considered. The first concerns the appearance and influence of possible antecedents. The second investigates company-established and supported special libraries.

Characteristics of special libraries in business and industry are also discussed and some objectives considered.

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Catalog on Microfiche at the Eastman Kodak Libraries

Clare E. Freund

Eastman Kodak Company, Research Laboratories, Rochester, N.Y. 14650

■ Since the summer of 1973, several libraries of the Eastman Kodak Company in Rochester, N.Y., have had their book holdings listed in a computer-produced union catalog on microfiche. Five libraries are participating with about 28,500 records on 95 fiche. The program processes input from several locations and provides control over a title from the time it is

ordered. The catalog is updated monthly and is inexpensive to reproduce; thus it is a useful tool for offices and laboratories that are physically remote from a library. This paper traces the evolution of the system and describes the current operational procedures. Advantages and disadvantages are discussed as well as possible further development.

IN THE 1960s, the Kodak Research Laboratories opened a new branch and needed a copy of the research library card catalog. Since the Eastman Kodak Company is in the photographic business, photographic reproduction of the cards seemed a desirable solution to the problem. A semiautomated camera was developed to produce 16-mm film strips, one foot long, showing the shingled cards; the film was mounted in plastic holders and was viewed in a Recordak Microstrip reader-printer. Supplementary card files continued to be prepared and, after an interval of several months, the cards were interfiled in the original card catalog, and updated film strips were produced.

As cards wore out in this process, the next step was to prepare the film strips directly from a computer, using the Stromberg-Carlson 4400 cathode-ray-tube display system. The computer center wrote the necessary programs and, for a while, prepared the IBM punched card input. But it soon proved to

be more economical for the library clerical staff to do their own keypunching. By 1968, a weekly hard-copy printout listed all titles that were on order for the research library and its branches, and the film-strip catalog was being updated monthly. A closed film-strip file of cataloged books published prior to 1966 was corrected only every six months in order to save on computer sorting time and yet provide access to earlier material. The process could reproduce the catalog inexpensively, and six different libraries in the company subscribed to it (1).

Other librarians liked it because no filing and revising of cards were required. At a time when other libraries were beginning to photograph their card catalogs to protect them from vandalism, this catalog was already automatically updated. However, much time was still spent manually cutting the film strips to critical size and mounting them in plastic holders. In addition, the library had to set strip parameters and to plan for new ones

Figure 1. Example of Title Record as Displayed on Microfiche

Item pulled from main record and displayed alphabetically in appropriate file (i.e., title, author or subject file)

FUNDAMENTALS OF PHOTOGRAPHIC THEORY 2D ED.

Authors	→ James T. H. Higgins G. C.	Publishing information
Title	→ Fundamentals of photographic theory 2d ed. NY, Morgan and Morgan 1960. 345P.	
Note	→ Circulating copies available in B-83 and B-59.	
Subjects	→ Photography - Theory. Photography - Textbooks.	Accession number needed only for computer input
LC Class no.	→ TR/200./J3/1960 E	
Dewey no.	→ R 770.01/J23F2/ R F B Z X M	101268J

*Ref. copy does not circulate.
Note may indicate availability of circulating copy*

Abbreviations that may precede the call number:

AV = Audiovisual collection
BJ = Bound journal collection
MF = Microfilm
OS = Oversize book shelf
R = Reference collection
RB = Rare book collection

Call number

Location symbols

R = Research Lib. B-83
F = Photo Tech Lib. B-69
B = Business Lib. KO
Z = Library B-59
E = Engineering Lib. B-23
X = Department copy
M = Patent Museum, EP

whenever it appeared likely that a strip might be filled during the next computer run. Also, it was very time-consuming to debug the program, and time had to be allowed for further development. The entire effort was a stepping-stone to the current system, because at this stage the staff became familiar with what the computer could do and specifically what it could do for the library. Ideas for possible operational improvement were collected during this period.

Planning the New Catalog

By 1972, planning for a new catalog was under way. Microfiche was selected rather than roll microfilm because it would provide faster access to information, and as many people as there were fiche

readers could view the catalog simultaneously. Since the Kodak Ektalite 140 viewer had just come on the market at a cost of about \$100, fiche readers seemed to be no obstacle. Since the display format had to be redesigned, it was decided to rewrite the entire program and have the fiche produced by computer-output microfilmer (COM) using the Kodak KOM-90 microfilmer.

The system-design experts had become very knowledgeable in library procedures. They wrote the new programs in the versatile PL/1 language, and by converting from fixed to variable records and variable length fields, they eliminated much formerly dedicated but unused space in storage. This resulted in substantial savings.

Librarians from other Kodak libraries began attending meetings and joined in the planning of a union catalog of Kodak libraries. To make that possible, one-letter symbols for individual libraries were assigned, and another display line was added to accommodate libraries using Library of Congress rather than Dewey classification. In addition, options were provided for either IBM magnetic tape Selectric typewriter (MTST) or IBM card input. The display format, as finally designed, is shown in Figure 1.

Maintenance of the old file had been by call numbers. They were not checked for uniqueness and sometimes required the computer to add a digit to make them so. Control by computer-assigned accession numbers has been adopted using check digits. Uppercase and lowercase characters and clearly defined paragraphs for author, title, subject, and notes display make for greater legibility. The computer is programmed to fill a fiche before starting the next one and to make the fiche title-header information readable to the naked eye. The computer-generated header lists the first item displayed on the fiche, the name of the company, and the month and year when the fiche was prepared; it indicates author, title, or subject file and includes a sequential number within each file. The first item displayed on the header also shows a "CONT" message to direct the user to additional material on the previous fiche when appropriate. All information originally contained on cards is displayed, with the file-entry point also shown in uppercase ahead of the item—somewhat to the left. Instead of a current file and another one for material older than 1966, the new catalog interfiles all records for speedier look-up. The process provides a weekly order report as before and is now also a status report of all titles in the process of being cataloged (see Figure 2). Better error checks and audits had been prime requirements. It is now possible to request computer-produced labels for book spine, book pocket, circulation, and shelf list cards not only at the time of cataloging, but also any time after that in case of later acquisition of additional copies.

The Cataloging Process

The cooperative cataloging process has been in operation since September 1973 and provides ordering and cataloging control for five different Kodak libraries. Others have expressed interest in joining so as to save labor and share in the book resources of the company.

A book request, after having been checked for possible duplication in the existing fiche catalog and in the status report, is typed on a multicopy purchase requisition (see Figure 3). The purchase-order number with a built-in symbol of the ordering library, as well as title, author, and publishing information, is then entered either by punched cards or the MTST typewriter. Ordering additional copies of books already in the system requires only that the purchase-order number, number of copies required, and date of order be entered.

Once a week, the computer center sends to the libraries a printout of the status report. The printout is arranged alphabetically by title and lists the newly entered information in addition to a computer-assigned accession number, the date the order was placed, and the number of copies ordered. Because the purchasing department deals with the vendors and takes care of financial transactions, the library does not have to keep records of expenditures. A computer-generated transaction code "1" indicates that the record is incomplete. There is also a line for optional messages to help identify the order information; it is limited to the printout and is eliminated in the fiche production. The computer supplies weekly a batch of receipt cards—one for each copy of a title ordered. While waiting for the order to arrive, the library files these cards by purchase-order number and maintains a file of duplicate purchase requisitions by title, so that customers interested in a book can add their names in the "To See" column.

When the ordered book arrives, the duplicate purchase requisition is pulled, and the order number and title are compared with the entry in the status report to make sure that the order is correctly filled. The

The duplicate purchase requisition helps the cataloger to find the entry in the status report when there is a discrepancy between the title ordered and the one actually published. A comparison between already submitted first author, first title, and publishing information and the book in hand may lead to corrections which require nothing on the part of the cataloger except to mark a checklist designed by the library for this purpose. This list also provides space for noting additional authors and titles and for adding pages, subject headings, call number, library symbol, and notes, if desired. Since most of the cataloging has been indicated with pencil on the title page of the book, an experienced assistant can easily handle the computer input. It is essential, though, that input rules prepared for this process be followed, so that uniform entries for all contributing libraries and correct sequencing in computer filing are maintained (2).

Labels can be requested at this stage and any time thereafter. If another participating library has already done the cataloging, the inputting library needs only to add its symbol and order as many sets of labels as required. Concurrently, the cataloger proofreads and corrects a weekly "Book Master Audit Control Listing" for mistakes in input format and an "Update Action Listing" for spelling mistakes and wrong use of codes. These lists also provide the libraries and the computer center with weekly statistics on the operation.

The following week, the new status report will display an "X" in designated columns for each completed aspect of cataloging, thus providing a check for completed operations which are on tape but not visually displayed on the status report. When all requirements for filming have been met, the transaction code in the status report changes from "1" to "2" (see Figure 2).

Figure 2. Library Book Orders—Status Report

PAGE NO.		COND	T A P D S B
LIBRARY BACK ORDERS - STATUS REPORT			
PURCHASE # DATE AREA	# DATE REC CDE		
ACCESS#	P.O.#		
131153E			
			X I X I X I X I
TITLE--FLCHARTING• PROGRAMMING SOFTWARE DESIGNING AND COMPUTER PROBLEM SOLVING		1	
AUTH.--BYCER B R			
PUBL.--NY, WILEY			
MSSG.--			
154QJF5 Q4 JZ T6 1 1 09 76			
			I I I I I I I I
			- - - - -
131467C			
			X I X I X I X I
TITLE--FLUIDISED COMBUSTION	R	2	
AUTH.--INTERNATIONAL CONFERENCE ON FLUIDISED COMPUSTION			
PUBL.--LONDON, INSTITUTE OF FUEL			
MSSG.--			
17263R7 05 Z8 T6 1 1 08 76			
			I I I I I I I I

Figure 3. Book Purchase Requisition Form

SEND TO RESEARCH LIBRARY B-83 K.P. ATTACH ANY DESCRIPTIVE LITERATURE KEEP GREEN RECORD FOR DEPARTMENT FILE.	FORM NO. 17332R3		EASTMAN KODAK COMPANY		RESEARCH LIBRARY BOOK PURCHASE REQUISITION	
	QUANTITY 1		TITLE FLYING CIRCUS OF PHYSICS			
	AUTHOR WALKER, JEARL					
	ISBN 0-471-91808-3				PRICE \$7.50	
	PLACE NEW YORK		PUBLISHER WILEY		DATE 1975	
	ACQ. NO.		TO SEE R. E. BACON		LAB COPY REQ'D BY	
	ARIA R NEW X		B. SMITH		LAB NAME	
	BOOK NO. 530				BLDG PHONE	
	SOURCE BPR 1975				LAB HEAD APPROVAL	
					DATE 7/6/1976	

Computer Output

Ordered labels arrive from the computer center once a week, arranged by title in batches for each of the libraries requesting them. The research library, since it is preparing for automated circulation, also receives keypunched circulation cards. Self-adhesive cloth labels, while more expensive, adhere much better than paper labels with the same adhesive and meet the library's requirements and the specifications of the computer printer.

Four labels are used: 1) A call-number label is placed on the spine of the book. 2) A label with the accession number is placed sideways on the book pocket so that, when circulation is automated, a comparison with the computer-printed circulation card will be simplified. 3) A label with author and title information is affixed to a 3 in. × 5 in. card for the shelf list catalog. This is the only card file still in use. In it, multiple holdings and department copies are currently entered manually. In the future, they may be recorded by means of an automated circulation system. 4) An author/title label is used on a conventional card for manual circulation.

No typewriter is used in the entire procedure—and no glue. Double-sided tape firmly and easily secures the book pocket.

Once a month, the computer center runs the combined input of all participat-

ing libraries on a Kodak KOM-90 microfilmer to produce an updated and corrected catalog on 4 in. × 6 in. negative microfiche. That week, the transaction code of cataloged items in the status report changes from "2" to "3" to indicate that the title is now on fiche, even though it may also remain in the status report till the order is completely filled.

As part of the COM-generated updated catalog, a list of all subject headings and cross references in use is prepared on microfiche every month to assist the catalog users in the library. A printout of the same information in book form is produced every year as an authority list for the various catalogers. In the interim, the computer center also provides a monthly printout of subject headings which the computer considers new but which may be familiar subjects misspelled or wrongly used. This listing is checked for accuracy and is then circulated to all catalogers who manually transfer the new subjects to their authority list. This seems to be the best method for becoming aware of new or revised headings.

It should be emphasized here that because these are "special" libraries, many of them dealing with specialized collections for a special clientele, each library is given the responsibility for developing its own subject headings. The headings are based on lists such as the Thesaurus of Engineering and Scientific Terms of the Engineers' Joint Council, the Thesaurus of

Photographic Science and Engineering Terms of the Society of Photographic Scientists and Engineers, the Thesaurus of Water Resources Terms of the U.S. Bureau of Reclamation, and the NASA Thesaurus. Subheadings used throughout are the standard ones originally used by the Armed Services Technical Information Agency.

The cataloger in the research library coordinates the various efforts and makes sure that all members conform in their use of subject headings. As long as there is no centralized cataloging department, input from several locations requires that one librarian act as coordinator. Only that way will entries be uniform.

In addition, a printout of newly cataloged items, arranged by classification, is produced. It is pasted up, reduced photographically, and printed as the *Research Library Bulletin*.

Description of Fiche

At a 42× reduction, a 4 in. × 6 in. fiche holds the equivalent of about 1,435 cards arranged in 25 columns, which is more than the contents of a conventional drawer. In 1976, the libraries gained 1,738 records. At an average of five displays per record, the equivalent of 8,690 new cards was contained on a little more than six additional fiche. At the beginning of 1977, there were 28,496 records on 24 title, 31 author, and 40 subject fiche. At about 900 cards to a drawer, 95 fiche are the equivalent of 152 conventional drawers! Silver emulsion fiche can be reproduced easily and inexpensively. Diazo or vesicular fiche, while probably not as lasting, is even less expensive. This makes it possible for the library to reproduce the entire catalog at frequent intervals.

Currently, 28 fiche sets of the union catalog are distributed monthly to 17 locations. All five participating libraries receive one or more sets, and various offices located some distance from a company library also receive sets. Eleven of them make use of fiche circulated elsewhere the previous month. When the Tennessee Eastman Company and Kodak Limited in Harrow, England, expressed

interest in the library's holdings, it was easy to mail them copies. On each of the two floors in the research library in Rochester, N.Y., one set of fiche is located between two Ektalite readers specifically for the library users. Additional sets are provided for the circulation and reference desks and in the cataloging department, where a reader-printer is available so that hard copies with instructions for corrections can be prepared.

Description of Computer Operations

The data processing system uses the IBM 360/370 computer and is programmed in PL/I. Input is either by IBM magnetic tape Selectric typewriter or keypunched cards, and output is by Kodak KOM-90 microfilmer having an uppercase and a lowercase character set. Processing is done in batch mode and involves several major computer programs. Among the output files created are:

- A weekly updated version of the original book master file arranged in accession-number order.
- A weekly file with the necessary information to produce the weekly purchase order status report, book labels, and book circulation cards.
- A weekly receipt card file which produces a receipt card for each copy of every new book ordered.
- A monthly new book list which provides a printout every month of all new books cataloged during this period.
- Three monthly updated permuted master files (one each for titles, authors, and subjects) used to generate the monthly microfiche book catalog.
- The monthly microfiche book catalog.
- Various printouts of errors and statistics covering all phases of the update run (3).

Advantages and Disadvantages

Even though the header clearly identifies each fiche both by file (author/title/subject) and sequential number within it, users tend not to return it to the correct location in the ringbinder housing frame. But while the integrity of the file is frequently disturbed, fiche rarely disappear and, in such a small file, can be quickly rearranged. Should a fiche ever

get lost, it would be inexpensive to reproduce. Simultaneous access to the file is limited by the number of microfiche readers available, but since they are small and inexpensive, additional ones can be purchased as needed. Viewing the fiche posed a minor inconvenience for people of different heights or with bifocals, but adjustable chairs and tilting viewers have solved the problem. Since the computer filing sequence differs substantially from manual filing, it requires not only the learning of input rules by the library staff, but also some accommodation by the library user (2, 4).

However, the following advantages of the system far surpass the disadvantages:

- 1) Input from various libraries provides a union catalog without laborious interfiling of cards.
- 2) A single correction or update is automatically displayed in appropriate locations throughout the catalog with substantial savings in staff time for file upkeep.
- 3) Unlike a card catalog, fiche provide protection against loss and vandalism.
- 4) Unlike a book catalog, fiche are inexpensive to update and reproduce, withstand rough handling, require no bursting of pages or expensive binding, are lightweight and not bulky and consequently pose no problem for storing and mailing.
- 5) Unlike a catalog on roll film that can be used by only one person at a time, there can be as many fiche users as there are fiche readers, and access to an item on fiche is usually faster than to an item on roll film.
- 6) Fiche can be inexpensively reproduced, either in single units or in complete sets, thus making it possible to create new catalogs and distribute them inexpensively to outlying stations.
- 7) Most important, the libraries in the system have complete control over every title from the day it is ordered and is first listed in the status report to the time when it appears on fiche.

There are special advantages to the library user, too:

- 1) The size constraint on the amount of information that can be printed on a 3 in. x 5 in. card is eliminated, and instead of seeing only one card at a time, the user sees simultaneously a fiche display of information that may be the equivalent of

several cards. The size of the display will, of course, depend on the screen size and lens of the reader.

- 2) Because it provides speedy and easy access to information, this catalog on fiche has been readily accepted by the user.
- 3) By means of a reader-printer, he can obtain hard copy of bibliographies.
- 4) He can consult the catalog not only at various locations within the library, but also in offices that are physically removed, and he can order desired material by telephone or mail.

Future Possibilities

Once automated circulation is incorporated, the catalog production process will be even more useful. The process will not only be able to control department-copy orders, but it will check on their whereabouts after arrival—something that has posed a problem in the past. Presently there is an average of five entries per title, but the library may one day decide to catalog in depth, or list tables of contents or book reviews together with specific titles. Even more journal articles, or books on microfilm or in audio cassettes than are already listed, could be included in order to bring this material to the users' attention. If the catalog becomes too large, the system could sort by year of publication and provide a closed catalog on microfiche up to a selected date. Perhaps, as MARC tape becomes more readily available, it will be possible to draw on MARC records for cataloging. The system is a versatile one which will also give any statistics requested. Obviously, it has many potential future applications.

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Received for review Mar 9, 1977. Revised manuscript accepted for publication Jul 11, 1977.



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New Measures of User Satisfaction With Computer-Based Literature Searches

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■ When the user determines satisfaction with computer-based retrieval situations, he focuses on four distinct aspects: the output, the interaction with the intermediary, the service policies, and the library as a whole. Measuring satisfaction requires investigation of each aspect with appropriate techniques. The state of the

art is reviewed. Techniques for output measurement have received the greatest attention. Videotaping can help our understanding of the interaction with the intermediary. Three assumptions were made about user satisfaction measurements. They will be affected by requirements, expectations, and compromises of the user.

THE CURRENT literature on user satisfaction with computer-based literature searches focuses primarily on users' satisfaction with the output of the retrieval system. . . . the output is the product, the list of citations, or sometimes the actual documents. The authors' premise is that users focus on much more than just the output, but there is little solid evidence of exactly what other aspects of computer-based literature services satisfy or dissatisfy users. Thus, two things are done here.

The first is to focus on aspects of user satisfaction that should be explored. Then, the state of the art in the measurement of user satisfaction will be reviewed.

Although many comments apply to all types of reference service, computer-based literature searches offer much cleaner user-librarian interactions for study than other service situations. In addition, there has been a substantial effort

to measure satisfaction in this one type of reference service. Thus, the focus is on computer-based searches, although implications for all types of reference service is often obvious.

Definition and Importance

There is no one simple definition or one measure of satisfaction. Rowena Swanson, for instance, recently wrote in *ARIST (1)*, "Identifying the variables that should compose a measure of patron satisfaction appears to be a stumbling block for researchers. . . ."

At an abstract level, satisfaction is clearly a state of mind experienced (or not experienced) by the user. In the case of a computer-based literature search, the user should go away content, with his requirement met. What must be emphasized is that satisfaction is ultimately a state experienced inside the user's head. It is,

therefore, a response that may be both intellectual and emotional.

If user satisfaction is a state of mind, the level of satisfaction will be determined by what is important to the user. To date, systems managers have assumed that it is the output of the system that is important. The authors agree that users undoubtedly focus on the output, but a number of additional concerns are also important.

Satisfaction from the user's point of view is important because it can be used by the system manager to determine how well the service performs. Valuable insights about how to improve the service can be gleaned from a study of user satisfaction. And it is probably related to continued use of a service (2).

A Medical Parallel

Other professions have similar interests in user satisfaction. The medical profession offers an interesting parallel to librarianship. For a long time they focused on correct diagnosis and treatment of a patient's medical problem. Recently some researchers have focused on patient satisfaction with other aspects of the "office visit." They have speculated about what patients are satisfied and dissatisfied with. And they have tried to determine, through systematic studies, how this might effect the success of treatments, the willingness to follow the doctor's instructions, and willingness to consult the doctor again (3).

For instance, one study in a pediatric clinic found a substantial correspondence between the mother's satisfaction and compliance with the doctor's instructions. And satisfaction was found to include more than just the mother's assessment of the correctness of the diagnosis and treatment. For instance, nearly 1/5 felt that they had not received a clear statement of what was wrong with their child. Almost 1/2 were still wondering what had caused their child's illness. A frequent cause of dismay was the physician's total disregard of the mother's account of what chiefly worried her about the child's illness. These factors seemed to affect the adequacy of treatment through the mother's willingness or unwillingness to follow instructions.

Aspects of Satisfaction

What is there about computer-based reference service, besides the output, which is a part of user satisfaction? What do users go away thinking about? What do they say to their colleagues about their experience? Users may think a wide variety of things in relation to their satisfaction with the use of a particular library.

The pediatric study mentioned above was described because it provides a good example of what these additional aspects of satisfaction may be and how they can be discovered. In the field of information studies these questions have been given some attention. A recently completed study at UCLA and the University of Georgia (4) attempted to analyze satisfaction with such services. Both the process of SDI profile construction for batch computer searches and the users' responses after the interview were studied. And the Syracuse University Psychological Abstracts Retrieval Service (SUPARS) used a broad range of satisfaction measures as well, e.g., semantic differential, post hoc interviews, controlled retrieval tests, and repeat user analysis (5).

For purposes of discussion, four aspects of satisfaction are identified. The user can focus on the output, on the library as a whole, on the service, and on the interaction with library personnel.

1) Users experience satisfaction with the output of a search. This is the most studied aspect of satisfaction. The only issues now are primarily measurement issues. This aspect will be dealt with in depth in a later section specifically on measurement.

2) Users will be satisfied or dissatisfied with a particular service because of their view of the library as a whole. For instance, the library's location might be an asset or a liability.

Assessing satisfaction with the library as a whole is particularly vexing. Such a global measure may be too intangible for many users and would result in useless data for the library manager. Increased understanding of this factor would be helpful but is beyond our scope and attention at the present time.

3) Aspects of satisfaction that deal with a particular "service" that the library provides is the third aspect of this general concept called "user satisfaction." This satisfaction or dissatisfaction may result from the way in which the service is operated. For instance, the use of a pre-interview form might be an issue, or the need to schedule an interview versus immediate availability of the librarian may annoy the user. Allowing or prohibiting the user from being present when the search is performed on the computer might be a concern. Pricing and its effect on satisfaction is also a growing concern.

Policy issues may effect satisfaction. Some policies may increase satisfaction while others may have unacceptable disadvantages. Would explanation of reasons for the policies increase satisfaction because the user would see them as justified? For instance, users might accept the policy of librarian only at the computer terminal if they understood that considerable saving in cost is realized this way. Little in this area has been reported.

4) User interaction with the library staff is not now measured, but surely it is on the mind of the user and affects user satisfaction. Moreover, it is especially worth measuring because it is under the immediate control of the librarian. Penland (6) and Shosid (7) suggest that the role of the librarian is not well-defined in the minds of the users, that users do not know what to expect of librarians, and that communication problems frequently arise. Swope and Katzer (8) found that substantial numbers of users in the library catalog area would not ask questions of a librarian. They found that users gave a variety of reasons for not wanting to ask, including dissatisfaction with past service.

Working with a librarian is a rather intensive human encounter for many users. These users must go to a relative stranger who knows things they do not know. They must admit ignorance and ask for help. They may be giving up valuable time to secure a product that they are not at all certain will be of any help to them. Thus, a lot of their satisfaction may be focused on how they are treated. Remember again that the doctor-patient

study cited above found just this sort of concern.

Studies of interpersonal communication have found that, in a general way, people are always concerned about "liking," "power," and "responsiveness" when they interact with others (9).

These factors may be operative in the situation of interest. "Liking" in the case of computer-based literature searching situations will correspond to perceptions of availability, willingness to provide service, and supportiveness. That is, users will be more satisfied if they perceive the librarian as available to assist them, willing to assist them, and supportive of them as persons and of their need for information. If the librarian does not communicate these things, many users may express dissatisfaction with the service, the output, and the library. Not now measured, this aspect, if studied, could uncover some interesting data.

The authors think that users of literature searching services react to the interaction during an interview in terms of "power" which refers to who is in control. All users may not have the same desire for the distribution of power. Some users will want to be in control. They will want to direct the interview and they will want the librarian to acknowledge that they are the more prestigious, valued, and thus more powerful of the two. Others will expect the librarian to direct the interview and will be dissatisfied unless the professional takes control. Or the situation may be perceived to be one where equals in prestige and value are interacting and thus the expectation is that each will act as equals. How well the librarian plays the expected roll may determine user satisfaction.

Finally, individuals want others to be responsive to them: to acknowledge their presence; to attend to their problem; to laugh at their jokes; to know when they are ready to stop talking and get to work. They do not like to interact with others who are "like a bump on a log." A librarian must, of course, be responsive, but "responsiveness" as measured in other interpersonal situations probably has no unique meaning in the computer-based literature search situation.

It has been suggested that user satisfaction will focus on a number of aspects of computer-based literature searches. Foremost, and readily recognized as such, the user wants output that provides the information that he needs. In addition, the user will be satisfied or dissatisfied with aspects of the library as a whole, the policies governing the computer-based literature searching service, and the human interaction which is necessary to obtain a search. Probably users will focus on "liking," "power," and "responsiveness" in their interactions with librarians, and this may have a great impact on their state of mind, or satisfaction, with the overall service.

Measuring User Satisfaction

How do librarians actually measure satisfaction of computer-based literature searching services? Since it is, by definition, a state of mind that is to be measured, problems abound. The librarian must depend on users' reports of how satisfied they are or on observation of their behavior, from which satisfaction can be inferred.

The authors believe that the concept of satisfaction, as a state of mind, implies at least three assumptions about how satisfaction should be measured.

Assumption number one: The user's state of satisfaction is experienced within the frame of his own requirements. The comprehensive search for one user and the orientation search for a few good pieces for another, are alternative types of requirements, according to Vickery (10).

Swanson's overview (11) of ERIC studies and the SDI studies of the Canada Institute for Scientific and Technical Information recounts the issues and the solutions of assessing systems from the user's point of view. A different product may be needed for each requirement. Thus, assumption number one is that the user's satisfaction will be a function of how well the product fits his requirement.

Assumption number two: Expectations may affect how a user approaches the service, what he requires of it, how he interacts with it, and his assessment of its

adequacy. Expectations may affect what he will view as enough and what he sees as a realistic and useful product of the service. Thus, assumption number two is that the user's state of satisfaction is experienced within the frame of his expectations (what the user sees as possible service).

Assumption number three: Just as expectations may affect satisfaction, other considerations such as costs (in energy, time, or money) may work to compromise the user's definition of satisfaction. Thus, assumption number three is that people may seek a solution within an acceptable range instead of an ideal or perfect solution.

It is believed these are reasonable assumptions which must be made explicit when measuring satisfaction. In using satisfaction data, analysis by types of users (requirements, expectations, compromises) may alleviate expected biases. These same assumptions, and in particular, expectations, provide information during the interview. For example, those with low expectations will probably not ask enough of the service, whereas those with high expectations will be dissatisfied with even the best product currently obtainable. Inappropriate expectations call for persuasive communication by the librarian.

Space limitations do not allow an exploration of how the different types of users will affect these measurements, but it is recognized that gathering data about users can be quite meaningful (12). To treat all users alike is to average apples, oranges, and Chevrolets.

The user's response to the output of a computer-based search is the best researched area of user satisfaction. It has received the most attention; measures, for example, include relevance, utility, and novelty (13-17).

It is suggested that there are additional focuses of user satisfaction and that observation of the user is a rich source of data that should be tapped. During the interaction with a librarian in planning a computer search, a user will provide an immense amount of information about his requirements, expectations and com-



promises. Some insight into understanding how satisfied the user is begins during this interaction. Much of this information will be communicated nonverbally, but it need not go unnoticed. The librarian need only make observations of user behavior at this point more consciously and more expertly.

This way of gathering information has the advantage of allowing the librarian to immediately adjust to the requirement of each user; it does not cost anything once the librarian has learned how.

Developing Skill

How do librarians—or anyone for that matter—learn to perfect the observation and interpersonal skills which they already have?

Until recently most of us acted as if these skills were innate. Either you had them or you did not. But many fields (e.g., the medical, educational, and counseling professions) have developed programs to train their future professionals in interpersonal skills (18). Rapoza (19) discusses interpersonal skills training for library students, and Gerald Jahoda at Florida State Library School, Pauline Atherton at Syracuse, and Judith Mucci (20) at the Orlando Public Library have been working with videotape recording, to that end.

One basic technique using the videotape recorder is especially useful in helping librarians improve their interpersonal skills on the job. The librarian and user would be videotaped as they go about the normal procedure of pre-search interviewing. Later, the librarian views the videotape privately with the assistance of a communication specialist. With the help of the

communication specialist the librarian analyzes the information available from the behavior of the user and the effectiveness of his own behavior. The librarian and the specialist look, for instance, for non-verbal cues of “liking” and “responsiveness”—interest in the user’s problem, or willingness to explain aspects of the service that are not understood. Signals about who is in control can also be analyzed—the “power” concern so often found in interpersonal communication situations.

On the basis of the analysis, the librarian may plan to behave differently in future interactions or correct some actions during the postsearch interview, if one is planned. This analytic process can be repeated some number of times so that the librarian can see how plans for improvement have worked out. Comparisons can be made to determine effects of different interviewing styles and behaviors with different users.

Variations on this basic procedure can include having the user view and analyze the videotape along with the librarian and the communication specialist. User comments about what they were thinking and feeling at various points in the interview can be very revealing. Of course, the librarian can also analyze the videotape without the assistance of a specialist and colleagues may or may not be included to provide additional insights. Mucci (20) describes such a use of the videotaping technique. The technique can be used by individual professionals to improve their own skills or by researchers to find relationships between librarians’ communication skills and user satisfaction. This data collection technique could open some interesting avenues of research and system improvement.

Summary

As in the case of physicians, librarians can not be sure what their clients are concerned about until they are asked. But it helps both the researcher and the practicing professional if he has some idea of what kind of answers to expect, and what kind of information to seek if users

have little to say. An outline of what may be important to users has been presented. It is suggested that aspects of the library as a whole, and computer-based search service in particular, should be included, and a measure of satisfaction with the interpersonal skills of the librarian will be important to measure carefully. "Liking" must be communicated and an appropriate balance of "power" must be established. Only measures of the user's satisfaction with the interview will uncover these aspects, so different from the usual output measures.

The researcher and the practicing professional have complementary jobs to do in the area of user satisfaction. The researcher can do the intensive, in-depth study of videotapes, follow-up interviews and well-planned sampling of users. But such research is expensive and by its intensive nature, limited in extent.

The practicing professional has an intimate, constant contact with users. With care, the professional on the job can discover what the user's unique focuses for satisfaction are. If professionals will share their findings, the more common focuses of satisfaction can be identified. Each professional will get ideas from these experiences if they are reported to others and compared.

We need to measure *all* the different aspects of user satisfaction and we need to use all available methods to measure user satisfaction. Only then can we accurately adjust the conditions surrounding computer-based literature services to increase user satisfaction.

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Received for review Nov 24, 1976.

Revised manuscript accepted for publication Aug 8, 1977.

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Methods of Citation Analysis in the Fine Arts

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■ Librarians who deal with the literature of the humanities rarely consider the potential usefulness of citation analysis. The previous ineffectiveness of this bibliographic tool results from the direct adoption of methods developed for the

sciences. From the example of the fine arts, it is apparent that citation counting, when applied to appropriate models, reveals significant features about both the specialized and general research literature.

OUR colleagues in the sciences and social sciences have used the techniques of citation analysis with considerable success for some time. It has been effective for both the recognition of various characteristics of the scholarly literature and the formulation of accurate bibliographies of "core" serial and non-serial materials within a given field. However, the method of citation analysis has never been used extensively in the humanities. It becomes evident, from the example of the fine arts, that the problem of the applicability of currently practiced methods is not inherent to the theory of citation analysis. The difficulties derive from the very nature of the scholarly literature within the discipline.

Implications

The most commonly used methodology involves the systematic counting of citations within the journal literature. The basic assumption is that the serials within the field give a complete and accurate

reflection of all important aspects of its scholarship. One must assume that this is essentially correct for the sciences and social sciences, as the technique has been used with much success. In these fields, citation counting has enabled scholars and librarians to better understand the overall properties of a discipline. An example of this is R. Broadus' "A Citation Study for Sociology" (1). Fifteen hundred citations from one year of the *American Sociological Review* were analyzed. Broadus was able to extract statistics on the ratio of book to serial use, percentages of materials cited from other disciplines, the use/age function, and the amount of non-English language citations. The value of such results is certainly great for the subject specialist. The implications of accurate data of this kind within the library are manifold, i.e., acquisition, collection development within adjunct areas, preservation, weeding, and reference.

Along with its ability to yield general information about a research literature, citation analysis has also been used in the development of bibliographies within the discipline. A. W. Hafner's study, entitled "Citation Characteristics of Physiology Literature, 1970-1972" (2) states its

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primary function to be "[the determination] of the names of the major serials used by researchers in the field of physiology." In non-serial literature, James C. Baughman's work, "Some of the Best in Sociology" (3), presents the librarian with a core of valuable materials which can be readily checked against current collections to facilitate future purchases.

The most comprehensive study to date of citation analysis within the fine arts was completed nearly twenty years ago. Wesley Clark Simonton's dissertation, "Characteristics of the Research Literature of the Fine Arts During the Period 1948-1957" (4), reveals certain properties which are still viable today. He chose six leading fine arts periodicals, one each from France, Spain, Italy, Germany, Great Britain, and the United States. Using the methods adopted directly from the earlier studies in the sciences, Simonton compiled statistical tables on subject areas similar to those of Broadus. The most important feature of Simonton's results was the profound difference they revealed in the nature of the fine arts literature. This fundamental contrast between the sciences and the humanities has a great bearing on the question of the feasibility of citation analysis, as practiced in other fields, as a tool for art librarians.

The four most important characteristics determined by Simonton's analysis were as follows:

- 1) Only 28% of the materials cited within the art literature was from serials. Contrast this with Hafner's figure, for example, of 90%.
- 2) Unlike other fields, the title dispersion in the fine arts is high—only 18% of the titles were cited more than once.
- 3) The use of materials from other subject areas was not extensive—over 75% of all citations were from history or art history.
- 4) The rate of obsolescence is much slower in the fine arts than in any area which has been analyzed in the sciences or social sciences (4, p. 61-70).

From this one can conclude that the nature of the scholarly literature in the fine arts makes the use of citation analysis, as a means of constructing a "core" literature, utterly ineffective. Baughman stated

that "there is a relatively small body of cited non-serial literature in the area of academic sociology" (3, p. 2977). The same cannot be said of the history of art. Thus, any comprehensive bibliography of the discipline would be too vast to serve any meaningful role within a library. Also, the use of citation analysis as a method for the acquisition of materials in related subject areas would be equally impossible. These two important bibliographic functions associated with citation counting must be considered inappropriate to the literature of this subject.

If citation analysis is not a feasible way to develop concise guides to the field, can a researcher accurately utilize its other function, the extraction of characteristics about the nature of the literature? Simonton's findings in this area are listed previously. Yet, if one examines the relative importance of the periodical within the fine arts, the validity of these statistics must be seriously questioned. Only 28% of Simonton's citations are to serials and, of this, only 17% are to periodicals (11% involved such items as museum bulletins and yearbooks). This limited use of journals coupled with a slow rate of non-serial obsolescence makes it difficult to consider periodical literature as the complete reflection of all scholarly uses and trends. The fine arts is essentially *not* a journal-based discipline. Art periodicals present a number of problems not encountered in other fields. The "nature of the beast," so to say, may account for the most fundamental difficulty.

Simonton stated that the viability of citation analysis is based on two assumptions: "first, that an author cites all, or at least the most important sources used in the preparation of his work and second, that all the sources listed were indeed used." He may have been satisfied that the citations within the six periodicals he had chosen fulfilled these requirements. However, if Simonton had selected a different type of art journal, his findings would not adhere to the standards of viability established in his work. For example, ten years' worth of citation counting within a periodical dealing with criticism (such as *Artforum*) would hardly

prove satisfactory. The nature of the citations (and often lack thereof) would require a reevaluation of the criteria discussed above. Which type of periodical, an *Art Bulletin* or an *Artforum*, truly reflects the scholarship of fine arts? In a field which is composed of both *fact* and *personal observation* (a fundamental difference between the arts and the sciences), one is unable to isolate a single journal as the most accurate indicator of all aspects of scholarship. Broadus, on the other hand, is certainly capable of doing this with the *American Sociological Review*. This profound difference between the arts and sciences makes the direct adoption of a methodology from one discipline to the other destined to encounter severe difficulties.

Difficulties in Using Periodical Citation Analysis

To more fully comprehend the dangers and inaccuracies which can arise from citation analysis involving art periodicals, one can isolate a particular statistic from Simonton's study and compare it to actual library collections. According to Simonton, the permanent collection catalog, that is, an illustrated and documented work describing a specific private or museum collection, would comprise only a tiny percentage of a library's holdings. From over 30,000 citations, Simonton included approximately 120 from either "private collection catalogues" or "public collection catalogues." Preceding solely from this statistic, it would appear that this type of literature has little importance within art historical scholarship.

It is doubtful that any art librarian would agree with the above findings. The collection catalog statistic was chosen for a specific purpose. Although barely recognized within the periodical literature, this unique form of art historical documentation provided the basis for an analysis which demonstrated the viability of citation counting within the fine arts. The citation theory itself can be a source of useful information. It requires the development of new models which more

appropriately suit the needs and character of fine arts.

Although the collection catalog forms a vital part of the literature within all geographical areas, it may be even more significant to the art of non-European countries. While western European art enjoys a high degree of exposure and publication, the work of other cultural areas is often less familiar. Thus, the student and scholar must turn to the collection catalog as a chief source of primary materials, such as photographs, translations of inscriptions, detailed descriptions of materials and decoration and bibliographic references. As librarians often possess less background in the non-Western areas, an analysis of this important research tool and its character, as revealed through citation counting, can yield some data which could effect library policies on acquisitions, preservation, and weeding.

An Example

This study will involve an analysis of ten permanent collection catalogs which present materials on Chinese bronze vessels. These bronzes comprise the single most important area of early Chinese art and a number of museum and private collections have been published in the past forty years. One can administer western-based citation processes to these works without transitional problems. This is because, although dealing with an oriental art form, all the catalogs were written in European languages, annotated U.S. or European collections, and followed certain standard organizational features which are comparable to those found within catalogs of western art collections. The books from which citations to the collection catalogs were drawn (which will be discussed below) were written by and primarily for European and American readers. Thus, there appears to be little significant difference between the format of western language publications on European and oriental art collections.

In order to give the reader an insight into the basic contents of an entry within a catalog of bronze vessels, Plate I has been

Figure 1. Plate I. Contents of an entry in a catalog of bronze vessels.

	Collection Catalogs*										
	Brundage	Buckingham	Cull	Eumorfopoulos	Freer	Pillsbury	Seligman	St. Louis	van Heusden	von Lochow	Percentage Containing Stated Entry Material
Object Name	*	*	*	*	*	*	*	*	*	*	100%
Dynasty (date)	*	*	*	*	*	*	*	*	*	*	100%
Patination	*	*	*	*	*	*	*	*	*	*	100%
Structural Qualities	*	*	*	*	*	*	*	*	*	*	100%
Decorative Qualities	*	*	*	*	*	*	*	*	*	*	100%
Notation to other pieces shown			*	*				*		*	40%
Notation to pieces in other collections			*	*				*		*	40%
Technical Observations					*				*		20%
Dimensions:											
Height	*	*	*	*	*	*	*	*	*	*	100%
Width	*	*			*	*			*	*	60%
Weight					*				*		20%
Inscriptions:											
Cited		*	*	*	*	*	*	*	*	*	90%
Illustrated			*	*	*	*	*	*	*	*	80%
Translated				*		*	*	*	*	*	60%

*See bibliography for full citations

included (Figure 1). The compilation of tables such as this can be a useful device for both the librarian and the researcher. Only a quick glance will reveal the strengths and weaknesses of the entry materials. To the librarian, this can serve as an indication of areas which will require supplementary information (in this case, for example, books on technical materials) and familiarize one with those 'standard entry materials' which seem to be included universally. For the scholar and student, tables can serve to save time searching each individual catalog. Also, since several of the catalogs discussed here are old and valuable, any possible alternative to direct handling may be desirable.

With this tabular introduction to the catalogs, it is now necessary to discuss the actual citation analysis study. The citations which were involved in this project came from non-serial literature. Unlike other studies, only the citations to the collection catalogs listed in the bib-

liography were analyzed. This is a radically different use of the method, but it reveals some important insights into the impact of one type of art historical literature, the collection catalog, on both specialized and general surveys. The model developed for this purpose is as follows:

- 1) Eight books on Chinese bronzes (see section II of the Bibliography) and eight books on Chinese art in general (see section III of the Bibliography) were selected.
- 2) The number of citations within the bibliographies of the above books were tabulated.
- 3) In order to answer more specific questions about the actual content of the citations within the 16 books, they were carefully analyzed and categorized.
- 4) The data extracted from the above procedures enables one to make pertinent observations about the function and importance of the collection catalog within the scholarly literature.

Due to the lengthiness of the tabulations, the results of the study will be dis-

cussed in summary form. As noted previously, full bibliographic material is available at the conclusion of this article.

Results

The results of the analysis of the bibliographic entries of both the specialized and general works were revealing. All of the bibliographies of the books dealing exclusively with the bronze vessels contained over 70% of the catalogs available at the time of publication. Perhaps more vital to librarians, however, was the high percentage (average of 63%) of catalogs cited within the bibliographies of the general surveys of Chinese art. These are works which have been prepared primarily for the student and nonspecialist. Thus, this opens the way to an increased demand for the catalogs.

Several conclusions can be drawn from the results noted above. First, the art historical literature tells us that collection catalogs, in the area of early Chinese art, are vital to research and should be acquired and preserved with care in the library. Also, the type of anticipated user is quite broad, ranging from the subject specialist to the beginning student. Finally, there appears to be little relationship between use and age, reinforcing the need to supplement existing collections and maintaining those catalogs already present.

The second part of the analysis involved the actual citations found within both the specialized works and the surveys. After carefully examining each citation's reference within the appropriate catalog, at least six areas—plates, structural analysis, decorative analysis, inscription, dating, and provenance—comprised the subject matter of the footnotes. A great many people, including librarians, feel that a catalog's only use involves its illustrations. It is interesting to note within both the surveys and specialized works on the bronze vessels, there was an even distribution between the three most commonly cited subjects—decorative analysis, inscriptions, and illustrations.

Most important, the results from the second part of this experiment

strengthens the argument that these catalogs are vital research tools. The scope of their use within both types of books indicates that the catalog contains materials which cannot be found elsewhere. This is a common phenomena in the Oriental art world, where objects are far less published and the catalogs become vital to any level of research.

The art librarian must constantly be aware of the diversities which so characterize the discipline. Not only is art history a literature of both fact and opinion but one of great differences among the bibliographic and research tools used by scholars in areas of subject speciality. Although we may envy those librarians who can produce neatly tabulated statistics on the characteristics of their respective disciplines or publish core bibliographies, one must recognize the potential uses of self-styled citation methods. There is a wealth of information within the fine arts non-serial literature which yields results of equal importance to the periodical findings of other fields.

Acknowledgment

I wish to thank two of my former professors from the Department of Fine Arts, Harvard University. Dr. Wolfgang M. Freitag, fine arts librarian, and Dr. Louisa F. Huber, assistant professor of Chinese art, contributed generously of their time and knowledge toward the formulation of this study.

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Received for review Mar 30, 1976.
Revised manuscript accepted for publication Jul 22, 1977.



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Selective Survey of Online Access to Social Science Data Bases

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■ Until recently there was little computer access to comprehensive bibliographic data bases in the social sciences. Now on-line searching of several files is made possible through services such as the Lockheed DIALOG® information retrieval system. These data bases are briefly surveyed, with emphasis on content, structure, and strategy appropriate for on-line, interactive searching. Indexes discussed in the paper include Social Sciences Citation Index®, Sociological Abstracts, Psychological Abstracts, Language and Language Behavior Abstracts, Historical Abstracts, ERIC, Exceptional Child Education

Abstracts, Foundations Directory, Foundations Grants Index, Public Affairs Information Service, and others. Coverage of certain social science topics is quantitatively compared among several social science and more general files, including NTIS and Comprehensive Dissertations Abstracts Index. Techniques for on-line thesaurus utilization are described as are systematic application of the same strategy across files through a search save feature and the use of merged keyword and term indexes from several data bases. The costs of such services are briefly analyzed.

SOCIAL science researchers and librarians need no longer feel "left out" of the rapid developments which have occurred in computer-based information systems. Within the last two years, many tools of information science have been applied to the social sciences so that a substantial amount of information is now more widely accessible.

For example, there are now nine social science bibliographic databases on the Lockheed DIALOG® Information Retrieval Service totalling approximately 1.1 million document records on-line as of March 1977. Furthermore, perhaps 350,000 additional records from eight closely

related files provide further in-depth information of some interest to the social scientist. Thus, nearly 1.5 million document records directly relevant to the social sciences are available—representing 10% of the 15 million records loaded on the DIALOG service. This percentage cannot be regarded as small, given the extensive size of the scientific literature and the long-established, government funded programs in scientific and technical information.

Enumeration of On-line Data Bases

Just what data bases are now available? With respect to the social sciences, there

are both multidisciplinary files such as Social Sciences Citation Index and Comprehensive Dissertation Abstracts Index, and a number of discipline oriented files such as Psychological Abstracts, Sociological Abstracts, Historical Abstracts, and others. The well-known, comprehensive Public Affairs Information Service will be available through DIALOG in the summer of 1977. It is expected that additional specialized social science and humanities data bases will be loaded in the next one or two years. A list of those available as of March 1977 on the various services is given in Figure 1. The quantitative information on size and currency is given with respect to the Lockheed DIALOG service with which I am the most familiar. An indication is made in the table should a particular data base be available in whole or part from the Systems Development Corporation SDC Search Service or from Bibliographic Retrieval Service.

There are also other data bases, such as ABI/INFORM and NTIS, and the New

York Times Information Bank which have high social science content. Many of the scientific and business files also contain material of interest. For example, the field of linguistics is especially well covered in INSPEC Computers and Control Abstracts. Also, many references and statistics on government, the economy and society are given in the various PREDICASTS data bases.

The question of data base selection for a particular search is, in the author's opinion, a less difficult choice than it often appears. There are now available at least three and frequently several more good choices for virtually any topic in the social sciences: 1) the appropriate functional data base, such as Language and Language Behavior Abstracts, 2) the only truly comprehensive social science data base—Social Sciences Citation Index, and 3) Comprehensive Dissertations Index. ERIC is almost always a good fourth choice, especially where the teaching of the subject is involved.

Figure 1. On-Line Data Bases in Social Sciences and Related Areas

		Content and Currency				Service* Avail- ability
Data Base Name	Subject and Source	Coverage (Entry Year to Present)	No. of Citations (3/77)	Update Fre'y	Citations Added	
I. <i>Social Sciences and Humanities (Primary Emphasis)</i>						
Social Scisearch®	Multidisciplinary index covering the world's most impor- tant social science journals; from the Institute for Scien- tific Information.	Jan 1972	400,000	Monthly	7,500	L
Psychological Abstracts	World literature in psychology and other behavioral sciences; from the American Psychological Asso- ciation.	Jan 1967	250,000	Monthly	2,000	L, B
Sociological Abstracts	In-depth coverage of sociology and related social science areas;	Jan 1963	75,000	Quarterly	2,000	L

*Quantitative information in this table given for first vendor indicated for that database. Other vendors may have varying amount of coverage.

L—Lockheed Information Systems, DIALOG Information Retrieval Service

S—Systems Development Corp., SDC Search Service

B—Bibliographic Retrieval Service

N—New York Times Information Bank

Data Base Name	Subject and Source	Coverage (Entry Year to Present)	Content and Currency			Service * Avail- ability
			No. of Citations (3/77)	Update Fre'y	Citations Added	
	from Sociological Abstracts, Inc.					
Language and Language Behavior Abstracts	World literature on linguistics, language development, speech, human communications, sound, disorders; from Sociological Abstracts, Inc.	Jan 1973	20,000	Quarterly	1,000	L
ERIC	Research and journals in the field of education; from the Educational Resources Information Center.	Jan 1966	265,000	Monthly	2,500	L, S, B
Exceptional Child Education Abstracts	Education of handicapped and gifted children; from the Council for Exceptional Children.	Jan 1966	23,500	Quarterly	750	L
Historical Abstracts	Worldwide history from 1450 to date. See below for U.S. and Canada; from American Bibliographic Center, Clio Press, Inc.	1973-74	16,000	Monthly	625	L
America: History & Life	U.S. and Canadian history, social life, patterns, urban affairs, etc. Includes journal articles; from American Bibliographic Center, Clio Press, Inc.	Jan 1964-74	40,000	Quarterly	900	L
Public Affairs Information Service (PAIS)	Comprehensive worldwide coverage of public administration, political science, international relations, law, public policy, demography and other public problems; from Public Affairs Information Service. (Available after Jul 1977)	1972 (Foreign) 1976 (English)	45,000	Quarterly	6,000	L
Child Abuse & Neglect	Ongoing research, bibliographic references & service programs; from Natl. Ctr. for Child Abuse & Neglect, HEW. (Available Summer 1977)	—	3,500	Semi-annually	400	L
II. Other Relevant Files (Partial Social Science Coverage)						
ABI/INFORM	Abstracted Business Information covering business, finance, and related fields; from ABI, Inc.	Aug 1971	50,000	Monthly	800	L, S, B
American Statistics Index	Statistical publications of U.S. Government; periodicals, annuals, biennials, surveys, reports, etc.;	Jan 1973	32,700	Monthly	800	S

Data Base Name	Subject and Source	Content and Currency				Service *
		Coverage (Entry Year to Present)	No. of Citations (3/77)	Update Fre'y	Citations Added	
	from Congressional Information Service.					
Art Bibliographies Modern	Art and design since 1800. Art history, artist bibliography, painting, sculpture, ceramics, printing, etc.; from ABC-Clio, Inc.	1974	21,000	Quarterly	2,000	L
CIS Index	U.S. Congress publications; hearings, committee prints; reports; documents, special publications; from Congressional Information Service.	Jan 1970	73,500	Monthly	900	S
Comprehensive Dissertation Abstracts Index	Doctoral dissertations from accredited universities (predominantly U.S.); from Xerox University Microfilms.	1861	550,000	Monthly	3,300	L, S
CRECORD	Capsulations of Congressional Record indexed and cross-referenced in 275 legislative areas. Covers activities on the floor of Congress; from Capitol Services, Inc.	Jan 1976	40,000	Weekly	1,750	S
Federal Index	Federal regulations, proposed rules, bills, hearings, speeches, reports, decisions, orders, etc.; selected from the Washington Post, Congressional Record, Federal Register, Presidential documents and Commerce Business Daily by Predicasts, Inc.	Jan 1977	21,700	Monthly	7,000	L
Foundation Directory	Descriptions of over 2,500 foundations with assets exceeding \$1 million; from the Foundation Center.	Current	2,500	Semi-annually	Compl. Rplct.	L
Foundation Grants Index	Cumulation of grants records of more than 400 U.S. philanthropic foundations; from the Foundation Center.	Jan 1973	35,000	Bimonthly	200	L
Grants	1,500 grant programs offered by federal, state, and local governments, commercial organizations, associations and private foundations; from Oryx Press.	Current	1,500	Monthly	50	S
LIBCON	Monographic material and audiovisual materials. Includes MARC	Jan 1965	1,399,400	Weekly	14,000	S

Data Base Name	Subject and Source	Content and Currency				Service *
		Coverage (Entry Year to Present)	No. of Citations (3/77)	Update Fre'y	Citations Added	
	records from Library of Congress and many more LC-cataloged items. English and non-English.					
New York Times Information Bank	Articles and news items from the New York Times and 60 other newspapers and journals.	Jan 1969	1,400,000	Daily	1,000	N
NICEM	Nonprint educational material. Preschool through graduate. Films, filmstrips, transparencies, audio/video tapes, phono records, cartridges, slides, etc. From the National Information Center for Educational Media.	Jan 1964	400,000	Monthly	3,000	L
NTIS	Complete Government Reports Announcements data base covering a broad range of disciplines of over 240 government agencies; from National Technical Information Service.	Jan 1964	560,000	Biweekly	2,300	L, S, B
SSIE	On-going and recently completed research in social, life and physical sciences, basic and applied. All kinds of organizations covered; from the Smithsonian Science Information Exchange	Fiscal Year	262,400	Monthly	9,000	S

An Index to Data Base Content

To provide a topical overview, a rudimentary directory of subject content for the most directly relevant data bases has been prepared (Figure 2). The subject areas include the 25 social science topics chosen for discussion at a recent meeting of the SLA Social Science Division and were augmented by a few additional topics. For each data base the coverage of each topic was rated as high (H), moderate (M), small (S), or minor/negligible. These opinions are the author's based on a review of the subject classification schemes, journal coverage, and his own experience with the files. Unfortunately, a lengthy study would be required to make a more rigorous quantification of

content. Comments would be welcome from librarians and abstracting and indexing services on the validity of the chart. This exposition is not intended to be an exact comparison of data bases but only an indication of the breadth of subject coverage.

The purpose and scope of the search strongly influence, of course, the selection of data bases. Primary developments in the field might be covered by examining one or two discipline-oriented data bases. If government activity or sponsorship is involved, then NTIS should probably be considered as well. A question involving behavior of individuals, groups, organizations, should likely be searched in Psychological Abstracts. Information on current research may frequently be found in Foun-

Figure 2. Selected Data Bases on the Lockheed DIALOG Service

Approximate Subject Directory to Selected Data Bases	Soc. Scisearch	Psych. Abs.	Sociol. Abs.	Lang/Lang Behavior	ERIC	Exc. Child Abstracts	Histor. Abs.	America Hist. & Life	Comp. Dissert. Index	NTIS	Foundation Dir. & Grants	ABI/INFORM	PAIS	FED. INDEX	OTHER DIALOG DATA BASES
Anthropology/ Archaeology	M		S	S			S	S	S		S		S		PTS.* PTS., INSPEC, EI
Business & Finance	S				S				H	M	S	H	M	M	
Communication	S	M	M	M	M	S			H	H	M	H		S	
Crime & Law Enforcement	H			S	S	S	S	S	S	H	M	M	H	H	
Drug Abuse & Alcoholism	M	H			M	M				M	S	M	M	M	BIOSIS PTS.
Economics	H		S	S	M		M	M	H	M	S	H	H	H	
Education	H	H	H	H	H	H	S	S	H	M	H	S	M	M	BIOSIS: AGRICOLA
Elderly & Handicapped	H	H		S	S	S			S	M	M	S	S	M	
Employment & Labor	S	M	S						M	M		H	M	H	PTS.
Foundations	M		S	M			S	S	M	S	H	S			AGRICOLA, BIOSIS, PTS. Eng. Index, AGRICOLA
Governments	H	M	M	M	M	M	H	H	H	H	H	S	H	H	
Health Care	H		S	S			H	H	H	H		S	H	H	
History	H		S	S			H	H	H		S		M		
Housing & Urban Dev.	M	M			S		S	S	M	H	S	S	H	H	
International & Foreign	M						H	H	H		H	M	H	H	AGRICOLA INSPEC ABI/INFORM, EI
Legislative & Legal	H	M			S	S	S	S	H	M	S	H	H	H	
Linguistics	M	M		H	M	S			S						
Personnel & Management	M	M	M		S				H	M	S	H			
Philosophy	M		M	M			S	S	H		S				
Planning & Zoning	H				S				M	H		S	H	M	Eng. Index, AGRICOLA
Psychology, Mental Health	H	H	H	H	M	M			H	M	M	S		M	
Religion	S	M					M	M	H		S				PTS., AGRICOLA AGRICOLA
Social/Econom. Statistics	S				S		S	S	M	S		M	H		
Social Issues	H	M	H		M	S	H	H	H	M	H	M	M	H	
Social Welfare & Work	M	M			M	S	S	S	M	H	M	S	M	H	AGRICOLA
Sociology	H	M	H		M	S			M	M	M		S		
Urban Affairs	M	M			M	S	M	M	M	H	M	S	H	H	Eng. Index AGRICOLA
Women's Issues	M	M		M	H		S	S	M		S	S	M	H	

* PTS. PREDICASTS data bases include Market Abstracts, F & S Indexes, Domestic Statistics, International Statistics

ation Grants Index. If an extremely comprehensive bibliography is required, it may be necessary to search a half-dozen or more files.

To obtain a more precise evaluation of coverage, a search was run on several key data bases to determine the number of

document records in which each phrase occurred literally. The results (Figure 3) again show multiple data base coverage for many topics.

Most of the data bases with which the author is concerned are bibliographic, wherein the machine record is a surrogate

Figure 3. Occurrence of Selected Phrases in Certain Dialog Service Social Science Data Bases (as of April 1976)

Exact Phrase	ERIC	NTIS	Social Scisearch	Psych Abstracts	ABI/ INFORM	Foundation Grants Index	Dissertation Index
leisure time	561	16	24	153	54	0	58
leisure activities	53	2	11	43	8	0	13
social history	82	1	201	43	2	2	112
social welfare	395	1,019	154	158	43	960	79
social indicators	64	56	72	17	14	1	13
municipal finance	1	3	4	0	4	0	13
urban affairs	94	26	97	6	18	41	4
urban studies	321	109	136	4	2	56	4
economic controls	2	5	1	0	13	0	1
gasoline shortage	0	0	1	0	19	0	0
national health insurance	16	15	39	27	88	1	5
no fault insurance	1	1	19	0	34	1	0
world food	132	13	44	6	78	16	8
music therapy	22	0	13	125	0	5	5

Figure 4. Major Data Elements of Social Science Data Bases Available Through the Dialog Service

Data Base	Title	Author	Author			Assigned Indexes		Numerical		Abstract
			Affil- iation	Journal Citations	Cited Author	Contrib. Control.	Uncontrib. Uncontrol.	Thesaurus On-Line	Classif. Scheme	
Social										
Scisearch	x	x	x	x	x					
Psych										
Abstracts	x	x	x	x		x	x	x	x	x
Sociolog										
Abstracts	x	x	x	x		x	x		x	x
Lang/Lang										
Behavior										
Abstracts	x	x	x	x		x	x	x	x	x
ERIC	x	x	x	x		x	x	x		x
Exceptional										
Child										
Abstracts	x	x	x	x		x	x	x		x
Histor										
Abstracts	x	x		x					x	x
Amer Hist										
& Life	x	x		x						x
PAIS	x	x		x		x				*
Dissertation										
Abstracts	x	x	x			x				
NTIS	x	x	x			x	x		x	x
ABI/INFORM	x	x		x						x

*Annotations

for the original document containing at least title, authors, and bibliographic citation. A review of the major data elements of the social science data bases available through the DIALOG information retrieval service reveals a great similarity (Figure 4) in structure with but a few significant exceptions. Most of the files

also contain assigned subject terms (controlled and uncontrolled), narrative abstracts or annotations, and author affiliations. Some also have on-line thesauri and numerical classification schemes.

There are also several files which are strictly factual or mixed bibliographic/

Figure 5. Extract from DialistTM —Merged Term-Frequency Indexes, Social Sciences Group

	ERIC	Psych Abstracts	Social Scisearch	Sociological Abstracts
crime	414	1175	619	906
crime conviction	—	20	—	—
crimes	37	172	101	186
criminal	273	731	997	849
criminal law	7	48	—	—
criminality	13	108	55	108
criminals	109	1081	26	122

Note: Lack of a posting indicates that specific precombined phrase does not exist as a formally assigned descriptor. However, the phrase could be searched for in textual fields such as titles and abstracts.

statistical. Examples of the first are Foundations Directory and Foundation Grants Index; examples of the latter include Predicasts Market Abstracts, F & S Indexes, and Domestic/International Statistics. On-line access is rapidly increasing to data bases which are factual or whose records may be described as “informative” in contrast to the previous “descriptive” orientation of bibliographic data base abstracts.

The Role of Record Structure and Differing Vocabularies

What effect does knowledge of record structure and content have on search comprehensiveness and precision? The obvious answer may be “plenty.” While a good understanding of the files is desirable and usually necessary for high recall of documents and efficient use of time and resources, the advent of on-line, interactive searching has made it possible to do relatively effective searching without completely detailed knowledge. There are several fundamental reasons:

- 1) the general ability to interact with results, changing search strategy as one proceeds,
- 2) natural language (or “full-text”) searching allowing one to look for exact phrases within subject-indicating fields such as titles, descriptors, and abstracts,
- 3) proximity and field specifications of terms, giving more precision than the simple logical intersection (“and” operation),

- 4) display of inverted indexes showing all terms actually used, thus guiding the user to alphabetically and conceptually near terms,
- 5) on-line thesauri which provide expanded cross references to topics,
- 6) truncation of word stems, obviating such problems as teenager, teenagers, teen-ager, teen-ager, and others,
- 7) off-line merged term indexes for several data bases by broad subject categories,
- 8) capability to store in computer memory a search concept (e.g., women’s liberation) or an entire search, which can be defined in full text fashion, saved in the computer, and applied to one or more data bases.

Most of these topics are illustrated in the examples given in Figures 5 and 6. While a searcher should usually divide the topic into logically independent concepts prior to search time, it is unnecessary always to make an exhaustive analysis of off-line search aids prior to search time. It is often a wise strategy to take a minimum amount of key input, make logical combinations and then output a few good records on-line, selecting the significant terms for reincorporation into the strategy.

The search shown in Figure 6 illustrates this point. The topic was “citizen participation in the operation of community facilities.” The basic inverted index of the file selected (Psychological Abstracts) was browsed for “community facilities.” The computer indicated there were 51

Figure 6. Sample Lockheed Dialog Search

Topic: Citizen participation in operating or governing community facilities, particularly the kind supported by recent federal legislation.

Run in Psychological Abstracts data base, April 1976.

The italic items below were keyed in by the searcher, the remainder are on-line responses from the computer printed on the searcher's terminal.

EXPAND COMMUNITY FACILITIES

Ref	Index-Term	Type	Items	RT
E1	COMMUNITIZED		1	
E2	COMMUNITY		6075	
E3	COMMUNITY ATTITUDES.....		94	1
E4	COMMUNITY COLLEGE STUDENTS		10	2
E5	COMMUNITY COLLEGES.....			1
E6	COMMUNITY FACILITIES		51	15
E7	COMMUNITY MENTAL HEALTH		76	7

EXPAND E6

Ref	Index-Term	Type	Items	RT
R1	COMMUNITY FACILITIES		51	15
R2	CHILD GUIDANCE CLINICS.....	R	57	7
R3	COMMUNITY MENTAL HEALTH CENTERS	N	304	12
R4	COMMUNITY SERVICES.....	R	1504	8
R5	DAY CARE CENTERS.....	R	26	3
R6	HALFWAY HOUSES	R	29	6
R7	HOUSING.....	N	366	2
R8	PUBLIC TRANSPORTATION.....	N	12	4
R9	RECREATION AREAS.....	R	10	4
R10	REHABILITATION CENTERS	R	30	3
R11	RELIGIOUS BUILDINGS	R		4
R12	SCHOOLS	R	4049	15
R13	SHELTERED WORKSHOPS	R	55	3
R14	SHOPPING CENTERS.....	N	4	3
R15	SUICIDE PREVENTION CENTERS	N	30	6
R16	URBAN PLANNING	R	20	5

SELECT R1-R6, R9, R10, R13, R15

1 2063 R1-R6, R9, R10, R13, R15
R1: COMMUNITY FACILITIES

SELECT CITIZEN(W)PARTICIPATION

2 20 CITIZEN(W)PARTICIPATION

COMBINE 1 AND 2

3 11 1 AND 2

TYPE 3/6/1-4

1. DOC YEAR: 1976 VOL NO: 55 ABSTRACT NO: 02739
A Study of Citizen Participation in a Community Mental Health Center.
2. DOC YEAR: 1976 VOL NO: 55 ABSTRACT NO: 01128
Citizen Participation in Decisionmaking: Myth or Strategy?
3. DOC YEAR: 1975 VOL NO: 53 ABSTRACT NO: 08054
Citizen Participation and Conflict.
4. DOC YEAR: 1975 VOL NO: 53 ABSTRACT NO: 02956
Advocates For Themselves: Citizen Participation in Federally Supported Community Organizations.

TYPE 3/5/4

DOC YEAR: 1975 VOL NO: 53 ABSTRACT NO: 02956
Advocates For Themselves: Citizen Participation in Federally Supported Community Organizations
Mogulof, Melvin B.
Urban Inst, Washington, DC
Community Mental Health Journal 1974 Spr Vol 10(1) 66-76

Discusses Variations in the Intensity of Citizen Participation in Community Organizations and Variations in the Decision Structures for Participation (e.g., Advisory Mechanisms or Citizen Control). It is Concluded that Although Control Mechanisms May have Certain Negative Consequences for Racial Integration, Citizen Participation Should be Viewed as a Policy Goal as Well as an Instrument for Achieving Other Goals.

CLASSIFICATION—09

SUBJECT TERMS—COMMUNITY SERVICES, PARTICIPATION: 10690, 36810

INDEX PHRASE—Citizen Participation, Community Organizations

SELECT PARTICIPATION

4 2102 PARTICIPATION

SELECT CITIZEN(W)CONTROL

5 2 CITIZEN(W)CONTROL

COMBINE 1 AND (4 OR 5) NOT 3

6 81 1 AND (4 OR 5) NOT 3

PRINT 3/5; PRINT 6/5/1-81

END

documents posted to it, and 15 cross references. These were then called up and ten appropriate terms were selected, yielding a "set" of 2,063 documents. The exact phrase "citizen participation" was then selected (from the entire data base) and combined with the first group on community facilities. A few titles were typed on-line. One of the "hits" was reviewed and the subject term "participation" was noticed as well as the phrase "citizen control." These were then selected, combined with "community facilities" and the additional hits identified. All the hits were then printed in an off-line bibliography. This search cost \$7.56 for on-line search time. Off-line printing for full records of the 92 hits would have been \$9.20.

Sample Cost Considerations

An example of surprisingly modest costs for on-line searching is given in Figure 7. Here, a "feminism/women's rights" concept was defined, using eight exact phrases and the truncated stem "feminis---." The strategy was initially defined in Social Sciences Citation Index and then stored away. Five and one quarter minutes were required for this operation. The search was then recalled and executed in each of five other files. A total of 1,466 hits were obtained in all six files (the degree of duplication is unknown but is probably around 15%), requiring a total of 18 minutes terminal time, costing

\$17.17 in computer and data communication costs.

In assessing the cost/benefits of on-line searching, one ought to consider the costs per typical searches rather than search rates. Most searches in one data base in the DIALOG service cost the user somewhere between \$2.00 and \$20.00. These figures include all costs paid to the retrieval service vendor (computer time, data communications, and off-line printing) but exclude terminal rental, telephone cost (if any) to reach a network number, and library personnel time. The average search time determined from hundreds of thousands of searches is currently running 10 minutes although many searches are done in a few minutes and some may require 20 or more minutes. The average number of off-line prints is 24. Using these statistical averages, the average search cost in certain data bases is as follows:

ERIC—\$7.40	Psych. Abstracts— \$11.57
NTIS—\$9.07	Social Scisearch— \$14.90

These are standard costs prior to application of volume discounts. The savings of many man hours to perform such searches manually (or even the impossibility of conducting such searches manually) appear to be substantial when compared to the relatively modest costs of searching indicated above.

Figure 7. SEARCH SAVETM Example

I. Search Definition and Saving

A general "feminism/womens rights" concepts was defined in the Social Scisearch[®] data base using natural language by selecting and combining (in the "or" sense) all records containing one or more of the following phrases:

feminis—(truncated form for feminism, feminist, feminists, etc.)	women's liberation
women's studies	women's liberation
women's rights	womens liberation
womens rights	women's lib
women's studies	womens lib
womens studies	

II. Execution of Search on Several Data Bases

	Data Base	No. of Hits	Time (Mins.)	Search Time Cost*
7	Social Scisearch	205	5.22	\$ 6.79
11	Psychological Abstracts	159	2.77	2.68
1	ERIC	928	6.15	3.38
15	ABI/INFORM	32	1.13	1.37
27	Foundation Grants Index	35	1.05	1.19
35	Compr. Dissert. Index	107	1.68	1.76
	Totals	1,466**	18.00	\$17.17

*Covers data base rate and data communications network.

Excludes offline printing.

**This is the total with duplicate citations.

SEARCH SAVE is a service mark of Lockheed Missiles & Space Co. Inc. to denote the capability to store initial search strategy to be used in later online searching of databases.

Summary

We are now observing the centennial of the telephone and the tenth anniversary of on-line interactive retrieval. It is interesting to note that social scientists and librarians now have at their disposal the mutually harnessed technology of both communications and computers. This fusion has resulted in

- more than 3,000,000 social science references on-line
- a large number of disciplinary data bases
- several good multi-disciplinary data bases
- on-line and off-line vocabulary identification aids, and
- cross data base search capabilities.

With continued growth in usage, future developments in data base coordination and retrieval system capabilities can be based on extensive search experience by social science librarians and their patrons.

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- Received for review May 10, 1976.
Revised manuscript accepted for publication Jul 14, 1977.*



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The Procedure Manual

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■ The procedure manual has many functions, and it is viewed differently by well-qualified librarians. The manner in which the procedures are determined, amended, and used gives the key to the differing views about procedure manuals; i.e., whether they are instruments of pro-

gressive or despotic library management. A procedure manual written to define and organize duties, and amended by staff with administrative approval, aids in the training of staff and in the orderly running of a library, small or large.

THE procedure manual is a handbook that gives step by step the method of doing things. It details how tasks should be performed. The policy and procedure manual is not new. Each yearly cumulation of *Library Literature* gives citations to a few manuals depicting the operation of specific libraries or groups of libraries. Many of them concern interlibrary loan directions or circulation desk procedures. However, *Library Literature* of recent years lists under the subject heading "procedure manuals" no articles discussing the writing of such a document. What purpose or purposes does a procedure manual fill, and to whom is it useful?

Purpose

The procedure manual is a blueprint for carrying out activities. It looks at whatever system is in use, or to be used, and it separates it into individual steps. For the clerk, it is a "how to" document. It helps understanding of what is to be done and why it is to be done; it trains. The manual leaves no doubt as to how tasks can be performed. They are listed in

chronological order as they are to be done.

One advantage of the procedures manual is that it aids in an orderly transition of duties from one individual to another. Because the procedures are written down, it alleviates the problem of a poor teacher passing on incorrect information about how the job should be performed.

For the professional, the manual serves a different purpose. It is a systems analysis that helps both to teach and to administer more effectively. It marks the level of decision making. It aids in defining goals, and it gives an overall view of the system. It also allows examination of the system for efficiency and effectiveness. Writing down step by step how to perform tasks makes it necessary to analyze task performance. Listing steps in sequence points out organization, or the lack of it. If what is being written is also a policy manual, purposes and reasons need to be delineated. Thus, for the professional, the policy and procedure manual leads to the examination of both purpose and methodology and to better organization. Sometimes the scrutiny of a procedure is

enough to make it questioned or modified. Quite often library methods need analysis and justification to determine if they are viable, and thus, should be retained.

Differing Viewpoints

One then would assume that the procedure manual would be universally praised. However, this is not the case. There are opposing viewpoints about it. One group equates the policy and procedure manual with autocratic management and teaches that it should be avoided. Another group feels that it is necessary for good library management.

An example of the feeling against procedure manuals occurred at a recent case study workshop attended by the author. One of the cases described a library run by an autocratic director. She formulated policies, all of which had been in effect for years. These policies were carried out by the staff through use of the procedure manual. Working in this library was described as an intolerable situation in which independent thinking was not permitted. Many of the evils were attributed to the procedure manual which provided solutions to every possible problem (and a few impossible ones). In leading the case study, the discussion leader equated the procedure manual with despotic rule. It was labelled as a tool to be avoided by progressive management. Although the participants were not directed to burn the evil object if their libraries possessed one, the implication was that the procedure manual was a regressive tool.

However, all library trainers do not share this view. Many training programs directed at the library sub-professional have used workshops to develop procedure manuals (1). The University of Oklahoma Health Sciences Center Library's extension division conducted such a training program. One of the requirements for receiving a certificate for completion of the two-week training course was the development by each trainee of a procedure manual for the library he or she managed (2). Most of the participants were individuals who managed the library

in addition to other duties. In this particular training program, the procedure manual was considered indispensable. The individuals being trained had neither formal library courses nor expertise in the field. The procedure manual development was used to teach acceptable library methods that could be adapted to an actual situation. As a learning tool, and as a step by step guide to refer to in the actual running of the library, the utility of the procedure manual was obvious.

For example, when one of the library managers trained under the program quit her job, the library journals were checked in and the library kept in usable order by a physician. This person followed the simple journal check-in procedures described in the procedure manual until another person took the two-week course.

Reasons for Differing Views

These are two differing views about the usefulness of procedure manuals. The key to the different attitudes is found in the manner in which the procedures are determined, by whom, and what happens to them after they are promulgated. The methodology makes the difference between autocratic rule and employee participation. Nothing can be more despotic than for the chief administrative officer or board to decide in minute detail how a library is to be run, write it down, and say, "This is it. I have decided. There will be no changes." This indeed makes of a procedure manual an instrument of dictatorial rule. This is an example of misuse of a policy and procedure manual, and it is a reason for its disrepute with some librarians.

However, if the policy and procedure manual is regarded as a growing instrument that takes cognizance of differing situations and persons, it can become a dynamic implement as well as a guide to better organization. Contrast the above situation with the procedure manual construction in which each department or sub-department head describes a recommended method to be used as a guide in the performance of duties. If subordinates

are consulted, if consultation takes place about any new or different methods proposed—with the opportunity to make changes—then participatory management has occurred. Many ideas work; many do not. But the procedure manual development can be used in such a way that change is possible, and it may be desirable as conditions alter.

The person performing routine tasks often wants to try a different method. Such a suggestion may or may not be a valid one. Obviously, in a large institution, to allow anyone and everyone to change the procedure manual at will would lead to total disorganization. However, those performing tasks need an opportunity to discuss methods with those responsible. The subsequent adoption of different methods, if suitable, leads to greater pride in working in an institution.

The extension division of the University of Oklahoma Health Sciences Center Library maintains a detailed but changing procedure manual for its own librarians and clerical staff. A librarian who recently joined this staff questioned the method of recording literature searches. The procedure was for the bibliographer to record in a daily log book the searches with subject headings as performed. A secretary transferred these to an alphabetical listing by user which was later typed up for the monthly statistics. The secretary also transferred these to 3 in. × 5 in. cards by subject headings for the cross file. The new librarian asked, "Why aren't these being recorded one time on multiple part forms, to be refiled as needed?" A staff meeting found the idea excellent, and the principal bibliographer worked out the details of the information needed on the forms. She then wrote out, in consultation with the other librarians, the procedure to be followed, and the procedure manual was amended accordingly.

This same staff decided against changing its method of keeping elaborate statistics of document delivery, because the information kept was useful for making journal title usage studies. The important point was staff participation in the decision making.

Procedures in the One-Person Library

The procedure manual is even more important in the one-person library, and in one such as the small hospital library, which is frequently unattended. In the one-person library, without written policies and procedures, if one employee leaves before the successor starts to work, the new individual is left without guidelines. However, if there is a written procedure manual, the new individual knows what has been done before. It leaves him with an opportunity to agree or disagree with his predecessor without being in total ignorance of previous methodologies. It lends a certain stability to the library, making for an orderly transition of duties from one individual to another.

Procedures are extremely important in the situation in which the user must perform many of the routines himself. Many small hospital libraries have a self-serve circulation system. Some use a method of having the user sign the pertinent information in a notebook. Others employ a system in which the user stamps the card himself with a preset date stamp. Whatever system is used, the procedures need to be carefully worked out, step by step, and posted where the user can see them. Clear procedures cut down on errors.

Conclusion

A procedure manual is a blueprint of how a library functions. It tells the clerk what to do and how to do it. It shows the librarian the degree of efficiency and effectiveness of the system. The methodology of arriving at these procedures and amending them is the key to how the procedure manual is viewed. The procedure manual written by a library head or board, bound, and left as stated is indeed an instrument of autocratic management. But a procedure manual in loose leaf format written to define and organize duties—to study their efficiency in terms of time, energy, and convenience and to measure their performance—is a different kind of tool. If it can then be

amended by staff with administrative approval to change it as needed, the procedure manual becomes a splendid tool of participatory management that aids both in the training of staff and the orderly running of a library.

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*Received for review Nov 12, 1976.
Revised manuscript accepted for publication Aug 8, 1977.*

Ruth W. Wender is coordinator, Extension Library Services, the University of Oklahoma Health Sciences Center, Oklahoma City, Okla.

MEMBERS IN THE NEWS

Jane Bonn, formerly at U.S. Bureau of Mines Library, Denver, Colo. . . . named reference librarian, U.S. Bureau of Reclamation, Denver.

Walter T. Brahm, formerly State Librarian of Connecticut . . . named director of development, Ohio Library Foundation, Columbus.

Bruce Connolly, librarian, Alfred University, Alfred, N.Y. . . . named to the Ohio College Library Center's Serials Advisory Committee (representing SUNY/OCLC network).

Billie Connor . . . promoted to head, Business and Economics Department, Los Angeles Public Library.

Laurie Diener-Waxler, formerly assistant librarian, G. D. Searle and Company . . . appointed staff specialist/information analyst, American Hospital Association Library, Chicago, Ill.

Lenna Easter, manager, Information Center, Calgon Corporation, Pittsburgh, Pa. . . . promoted to senior market research analyst.

Mary Jo Eiser, formerly librarian, Pfaudler/Sybron Corporation, Rochester, N. Y. . . . named librarian, Research Library, Taylor/Sybron Corporation.

Janet Erickson . . . appointed reference librarian, Norris Medical Library, University of Southern California, Los Angeles.

Josephine R. Fang, School of Library Science, Simmons College, Boston, Mass. . . . awarded CLR fellowship to study libraries in China.

Jane Franck, formerly librarian, Ford Foundation, New York . . . named director, Columbia University Teachers College library, New York.

Janet Hall, formerly at York University Library, Downsview, Ont., Canada . . . now at Municipal Reference Library, Toronto.

Virginia Wilcox Herold, head librarian, Colorado School of Mines library, Golden . . . retired.



EASTER

Mildred E. Hogan, librarian, Transco Companies, Houston . . . retired.



ROOF

Constance Hudelson . . . named head of Adult Services & Reference, Jefferson County Public Library, Lakewood, Colo.

Mary Kaczmarek, Johnson Controls, Inc. Technical Library, Milwaukee, Wisc. . . . named president-elect, Southeast Wisconsin Regional Conference.

Loretta J. Kiersky, supervisor, Information Center, Airco, Inc., Murray Hill, N.J. . . . recipient of 1977 National Micrographics Association Award of Merit.

Lynn Mullins, formerly chief librarian, American Geographical Society, New York . . . appointed head, Marymount Manhattan College library, New York.

Aileen Mundstock . . . named technical information specialist, Universal Foods Corporation, Milwaukee, Wis.

William Murray, director of media services, Aurora Public Schools, Aurora, Colo. . . . elected chairman, Central Colorado Library System Board of Directors.

Mariana Reith . . . formerly head, Business and Economics Department, Los Angeles Public Library . . . named Technical Services Division Librarian.

Daphne Roloff, formerly head librarian, Cleveland Museum of Art . . . appointed executive director, Chicago Art Institute Libraries.

Sally Roof, assistant manager, Information Center, Calgon Corporation, Pittsburgh, Pa. . . . promoted to manager.

Catherine D. Scott . . . recipient of The Catholic University of America 1977 Annual Alumni Achievement Award in the field of Public Information.

Pamela A. Sexton . . . appointed assistant director for technical services, U.S. Air Force Academy Library, Colorado.

Russell Shank, formerly director of libraries, Smithsonian Institution . . . appointed head librarian, University of California, Los Angeles.

Zella Shannon, head, History and Travel Department, Minneapolis Public Library and Information Center . . . named associate director.

Beth J. Shapiro, urban affairs librarian, Michigan State University Libraries . . . recipient of CLR grant for a year of graduate study in the liberal arts and sciences, Advanced Study Program for Librarians.

Lily Shung, formerly at Monroe Developmental Center, Rochester, N.Y. . . . named librarian, Pfaudler/Sybron Corporation, Rochester.

Edward G. Strable, manager of information services and vice-president, J. Walter Thompson Company, Chicago, Ill. . . . named to panel of judges, *American Libraries'* Prize Article Competition.

Peggy A. Sullivan, formerly dean of students, Graduate Library School, University of Chicago . . . named assistant chief librarian for branches and regional libraries, Chicago Public Library.

Meryl Swanigan, supervisor, Reference Service, Atlantic Richfield Company, Los Angeles . . . named corporation librarian.

Julie A. Virgo, director of education, Medical Library Association, Chicago, Ill. . . . named executive secretary, Association of College and Research Libraries.

Annelene Voigt . . . promoted to chief librarian, Lockheed-California Company, Burbank.

Marijo S. Wilson, formerly at Flower Veterinary Library, Cornell University, Ithaca, N.Y. . . . appointed senior assistant librarian, Catalog/Reference Department, Mann Library, Cornell University.

Report of the SLA Representative to the Canadian Library Association

The Canadian Association of Special Libraries and Information Services (CASLIS) and Special Libraries Association, Montreal Chapter, held a joint workshop, Saturday morning, Jun 11, at the Queen Elizabeth Hotel, Montreal, during the Canadian Library Association's 1977 annual conference.

"Networking in special libraries" was the topic. This occasion provided an opportunity to become familiar with the current situation in Canada and the U.S.

Presentations were given by Sharon Vipond, chairperson, MCSLA Networking Committee; Hazel Fry of CASLIS Ad Hoc Committee on Networking; and Nancy Leclerc, MCSLA

President 1976-77. Speakers were Hope Clement (National Library of Canada), who spoke on DOBIS, an integrated on-line library management system; Philippe Lemay (CISTI) and Anne Foster, who spoke on Medline and QL systems, respectively.

Discussion followed. Participants in the workshop expressed the hope that this dialogue may continue and that another joint program can be planned in the future.

EILEEN B. MORASH

Due to postal delays, this item was omitted from the September issue of *Special Libraries*.

Plenum Essay Competition: \$1,000 Award to be Made

The Plenum Publishing Corporation Award will be presented at the SLA Kansas City Conference in June 1978. The award will consist of \$1,000 and a certificate. It will be "presented to a member of the Special Libraries Association for an outstanding original paper, not previously published or presented, covering any aspect of special libraries or special librarianship."

Travel costs for the winner to attend the Annual Conference will also be contributed by the Plenum Publishing Corporation. The award will be presented by the President of Special Libraries Association at the Awards Luncheon.

Timetable

The deadline for submission of papers is **Feb 28**. The winner will then be notified by Apr 30.

Papers should be submitted to the chairman of the Plenum Award Committee, Miriam Tees, The Royal Bank of Canada, P.O. Box 6001, Montreal, P.Q., Canada H3C 3A9.

Criteria

Papers will be judged on the following criteria: relevance to special librarianship; style, including clarity,

format, and readability; originality; and effect of the paper as a whole on the reader.

Guidelines

- Papers may cover any aspect of special libraries or special librarianship.
- Papers should be original, presenting new ideas or concepts.
- The paper must present original work, either based on new work or on the development of new principles.
- Technical style in the presentation will be considered.
- Papers to be presented as Contributed Papers at the Annual Conference following this Call for Papers may, at the same time, be submitted for a Plenum Publishing Corporation Award. (However, papers which had been presented at previous Conferences are not eligible for consideration.)
- The Committee may make any inquiries about the content as necessary, in order to judge the papers submitted and to determine their merits.
- If, in the opinion of the Committee, no paper of quality has been submitted in any year, no award will be made in that year.

IN MEMORIAM

Marian Manley Winser

Marian Manley Winser, librarian of the Newark, N.J., Business Library from 1926 to 1954, died on June 21, 1977, at her home in Summit, N.J., at the age of 85. She is survived by her husband Gerald Winser.

Today when public and private business libraries are regarded as essential tools for large corporations and small businessmen alike, one tends to forget that in the 1920s, business libraries were just beginning to receive the recognition that they have since achieved. Marion Manley Winser began her professional employment under John Cotton Dana at the Newark Public Library. In 1926 she was appointed head of the Business Branch, Newark Public Library. She helped to stimulate the recognition of business libraries through her service in the professional associations; her affiliation with business groups; and her articles, pamphlets, and books dealing with the use of library service to the businessman.

As for her professional service, she was an active participant in the work of the American Library Association, the Special Libraries Association, and the New Jersey Library Association, where she served as chairman or member of various committees of each association. She was also editor of *Special Libraries* from 1934 to 1939, president of the New Jersey Library Association in 1946, and a member of the publications committee of Public Affairs Information Service from 1936. Her long and devoted service to the library profession was recognized in 1953 by the American Library Association when she was presented with the Lippincott Award for distinguished service by a librarian and in 1959 by the Special Libraries Association when she was admitted to the Hall of Fame.

Perhaps of equal importance was her participation in the activities of various business groups. This afforded her a continuing opportunity to point out to the businessman the value to him of close cooperation with the business library. At the same time, as a lecturer at the Rutgers University School of Business Administration, she instructed hundreds of young businessmen in the use of library resources. In 1950 Rutgers University bestowed on her an honorary master's degree for her "contribution in building up the Business Branch of the Newark Public Library and for unfailing cooperation with the University in the important work of the School of Business Administration."

Finally, Marian Manley Winser used every means at her disposal to publicize the business library. She initiated the publication of *Business Literature*, a monthly publication devoted to annotated bibliographies on various business subjects. She set up exhibits in connection with trade association conventions; she addressed such groups as Rotary and Kiwanis; and above all, she wrote innumerable articles for library and trade periodicals and compiled or edited numerous books and pamphlets, all pertaining to business librarianship and business source materials. As the *Newark News* commented editorially at the time of the Lippincott Award to her: "By her pioneering in the field of business librarianship, by her numerous books devoted to it and by affording a constantly widening service to business men, generally, to corporations, business associations and trade unions, she literally made of the [Newark Public] library's business branch the country's Exhibit A."

Ruth von Roeschlaub

Addendum

In addition to the officers mentioned in "SLA Election Returns" (*Special Libraries* 68 (nos. 7/8):284 (Jul/Aug 1977)), Ellis Mount is serving the second year of his three-year term (1976/79) as Treasurer.

Revision of Interlibrary Loan Form (ILL) Including Copyright Law Representations

The National Interlibrary Loan Code, 1968, is a product of the ALA/RASD Interlibrary Loan Committee as is the national Interlibrary Loan Request form which has been used for many years. When it became evident that changes would have to be made in this form because of the Copyright Revision Act of 1976, the RASD Interlibrary Loan Committee appointed a subcommittee to revise the form. The results of their work were accepted by the RASD Board in Detroit during the 1977 ALA Conference.

The most important change is #5 which was devised to facilitate conformity with the Copyright Revision Act of 1976 and the several sets of Guidelines which provide assistance in application of the law. Because this modification is essential to the legality of interlibrary loan operations which involve photocopying, it is explained separately in some detail.

Several major library supply houses have given assurance that the new form will be available before it is needed. If you have any questions about the form or the explanations, please direct them to the co-chairperson of the ALA/RASD Interlibrary Loan Committee, Ronald Naylor, University of Maryland Libraries, McKeldin Library, College Park, MD 20742.

Revised Interlibrary Loan Form

The new copyright law, PL 94-553, takes effect on Jan 1, 1978. Since the form had to be revised to provide space for copyright representation, other changes have been incorporated. The attached sheet shows the new form that was approved by the RASD Board at the 1977 annual ALA Conference. The reasons for each change are explained below.

1. "Request for loan or photocopy." The title of the form has been changed. Many librarians have pointed out this form is frequently used for photo-duplication requests and the new title better reflects the use of the

form. The boxes have been included to make it easier for the receiving library to sort incoming requests.

2. "Request of" has been added so that a supplying library can suggest an alternative source for the requested item.

3. "No renewals" has been added for the benefit of supplying libraries who do not wish to renew the loan or material to requesting libraries.

4. "Note: the receiving library assumes responsibility for notification of non-receipt." This was displaced by the copyright statement.

5. The lower left corner contains the language which will enable a supplying library to be assured that the requesting library is making its request in compliance with the law. A complete examination of this language and how to use it is contained in the attached document.

6. "If non-circulating . . ." The language is changed for clarification.

7. "ISBN, or ISSN, or LC card, or OCLC, or other number, if known" has been added because of the increasing use of numerical identification for specific bibliographic items. Unless mandated by local convention, it is not essential to include this information, but provision of this identification may speed delivery.

8. The revised language, "verified in: OR: item cited in" attempts to clarify what information is sought. "Verified in" means that the accuracy of the bibliographic information in a citation has been checked in a source such as NUC. The source should be listed. If the citation cannot be verified in a bibliographic source, the requesting library should record the publication in which the patron found the citation.

9. The lines for author and title have been changed to clarify the language. Parentheses have been removed because they tend to suggest that the information requested in parentheses is secondary information. The word "year" was changed to "date" in the periodical title line to encourage recording the actual date

if known. In the book line the word "year" was substituted for the word "date." The word "series" was included because of its bibliographic importance.

10. "Not needed after" has been added for guidance to the supplying library in the case of protracted delivery.

11. "Requester's order no." This is essential in the billing procedures of many photoduplication centers.

Copyright Representation on the National Interlibrary Loan or Photocopy Request Form

The form* used to request a loan or photocopy of an item from another library has been modified to facilitate conformity with the Copyright Revision Act of 1976 (PL 94-553) and the guidelines which are intended to provide assistance in the application of the law. The sections of the law which relate to copies that may be requested by using the interlibrary loan or photocopy request form are Sections 107 and 108. Two sets of guidelines related to Section 107 may have application to interlibrary loan transactions. These are the "Agreement on Guidelines for Classroom Copying in Not-for-Profit Educational Institutions" and the "Guidelines for Educational Uses of Music." The guidelines which relate directly to interlibrary loan are the "Guidelines for the Proviso of Subsection 108(g)(2)" which were developed by the National Commission on New Technological Uses of Copyrighted Works (CONTU).

The requesting entity (borrowing library) is responsible for making sure that the request conforms to the copyright law and the accompanying guidelines. To assure the supplying entity (lending library) that the request does so conform, the requesting library must check one of the two boxes provided in the lower left corner of the paper form or include one of the corresponding codes, CCG (Conforms to Copyright Guidelines) or CCL (Conforms to Copyright Law), in the electronic transmission of the request. Unless one of these boxes is checked or one of the codes is included, the supplying entity may refuse to fill the request.

*This is the form which transmits a request from one library to another, not the form which the user fills out to request materials. The latter form must include a warning of copyright in accordance with requirements that the Register of Copyright shall prescribe by regulation. (See PL 94-553, Subsections 108(d)(2) and 108(e)(2).)

A check in the first box or [electronic] transmission of the code "CCG" means that the request is in conformity with the CONTU "Guidelines." Requesting libraries should bear in mind that the "Guidelines" apply *only* to materials described in Subsection 108(d) of the law, i.e., an article or other contribution to a copyrighted collection or periodical issue or a small part of any other copyrighted work. A check in the second box or [electronic] transmission of the code "CCL" means that the request is legitimate because it is authorized elsewhere in the copyright law.

108(g)(2) Guidelines (CCG)

The first box should be checked by the requesting entity, or the code "CCG" included in transmission of the request, under the following circumstances:

1. When the requesting entity has observed the quantitative restrictions set forth in Guideline #1, or
2. When the requesting entity has in force or has entered an order for a subscription to a periodical (See "Guidelines" #2a) or has entered an order for a copy of any other copyrighted work (See "Guidelines" #2b), or
3. When the requesting entity owns the material to be copied and would have been able, under the provisions of Section 108 of the law to supply the requested copy from materials in its own collection had such materials been reasonably available (see "Guidelines" #2b).

Other Provisions of Copyright Law (CCL)

This box should be checked by the requesting entity, or the code "CCL" included in transmission of the request, whenever a copy of material in the public domain is requested or the request for a copy is sanctioned under parts of the law other than Subsection 108(d) as qualified by 108(g)(2) and its interpretive guidelines. This box should be checked under the following circumstances:

A. When the requested copy becomes the property of the user:

1. If the request is for an entire work or substantial part of a work where the requesting library has determined that a copy cannot be obtained at a fair price (See Subsection 108(e));
2. If the request is for a copy of book or periodical material made for a teacher in conformity with the "Agreement on Guidelines for Classroom Copying in Nor-For-Profit Educational Institutions" or for copying of music under the "Guidelines for Educational Uses of Music";
3. When the requesting library believes, because of the circumstances of the request, that the reproduction and distribution of the

<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <input type="checkbox"/> Borrowing Library <small>Fill in left half of form including both library addresses in full</small> </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>Fold here</small> </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>Send sheets A B and C to lending library, and enclose shipping label</small> </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>Lending Library</small> </div> <div style="border: 1px solid black; padding: 2px;"> <small>Fill in pertinent items under REPORTS, return sheets B and C to borrowing library</small> </div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>Date of request:</small> _____ </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>Not needed after:</small> _____ </div> <div style="border: 1px solid black; padding: 2px;"> <small>Requestor's order no.</small> _____ </div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>Call No.</small> _____ </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>For use of</small> _____ </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>Status</small> _____ </div> <div style="border: 1px solid black; padding: 2px;"> <small>Dept.</small> _____ </div>	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>Book author: OR: periodical title, vol. and date</small> </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>Book title, edition, place, year, series: OR: periodical article author, title, pages</small> <input type="checkbox"/> This edition only </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>Verified in: OR: item cited in</small> </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>ISBN, or ISSN, or LC card, or OCLC, or other number if known</small> _____ </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <small>If non-circulating, & cost does not exceed \$ _____, please supply</small> <input type="checkbox"/> Microfilm <input type="checkbox"/> Hard copy </div> <div style="border: 1px solid black; height: 100px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; padding: 2px;"> <small>Request complies with</small> <input type="checkbox"/> 108(g) (2) Guidelines (CCG) <input type="checkbox"/> other provisions of copyright law (CCL) </div>
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Form rev 6 77

AUTHORIZED BY: _____
(FULL NAME) Title _____

Request for ☐ LOAN or ☐ PHOTOCOPY
According to the A.L.A. Interlibrary Loan Code

REPORTS: Checked by _____
SENT BY: ☐ Library rate ☐ _____
Charges \$ _____ Insured for \$ _____
Date sent _____
DUE _____

RESTRICTIONS: ☐ For use in library only
☐ Copying not permitted ☐ _____

NOT SENT BECAUSE: ☐ In use
☐ Not Owned
☐ Non Circulating
☐ Request of _____

Estimated Cost of: ☐ Microfilm _____
☐ Hard copy _____

BORROWING LIBRARY RECORD:
Date received _____
Date returned _____
By ☐ Library rate ☐ _____
Postage enclosed \$ _____ Insured for \$ _____

RENEWALS: ☐ No renewals
Requested on _____
Renewed to _____

(or period of renewal)

Note: the receiving library assumes responsibility for notification of non receipt

copy is a "fair use" (See Section 107 for four statutory tests to determine whether a given reproduction is or is not a "fair use.");

4. When the requested photocopy is a copy of the kind of material described in Section 108(d) but published earlier than five years prior to the date of the request and, therefore, not covered by the "Guidelines";
 5. When the requested material is not subject to the reproduction rights granted by Section 108, (i.e., is a musical work, a pictorial, graphic or sculptural work, or a motion picture or other audiovisual work other than an audiovisual work dealing with news) but the requesting library believes that, because of the circumstances of the request, the reproduction and distribution of the copy would be a "fair use" (See Subsection 108(d) for limitation of Section 108. See Section 107 for four statutory tests to determine whether a given reproduction is or is not a "fair use.")
- B. When the requested copy becomes a part of the collection of the requesting library:
1. If the request is for a facsimile copy of a published work requested solely for replacement of a damaged, deteriorating, lost, or stolen copy of a work and the requesting library has determined, after reasonable investigation, that an unused replacement is unavailable at a fair price (See Section 108(c));
 2. Where, because of the circumstances of the request, the requesting library believes that the reproduction and distribution of the copy would be a "fair use" (See Section 107 for four statutory tests to determine whether a given reproduction is or is not a "fair use.")

Sources

The Copyright Revision Act of 1976 (PL 94-553), Sections 107 & 108. Pages of the law and

reports were distributed to SLA members in a special mailing in Nov 1976. They were reprinted in *American Libraries* 8:250 (May 1977).*

The "Agreement on Guidelines for Classroom Copying in Not-For-Profit Educational Institutions" originally appeared in the House Judiciary Committee report (H. Rept. 94-1476). Pages of the law and reports were distributed to SLA members in a special mailing in Nov 1976. They were reprinted with corrections in *American Libraries* 7:611 (Nov 1976).*

The "Guidelines for Educational Uses of Music" originally appeared in the House Judiciary Committee report (H. Rept. 94-1476). Pages of the law and reports were distributed to SLA members in a special mailing in Nov 1976. They were reprinted with corrections in the *ALA Washington Newsletter* (Nov 15, 1976).

The "Guidelines for the Proviso of Subsection 108(g)(2)" originally appeared in the House Judiciary Committee report (H. Rept. 94-1476). Pages of the law and reports were distributed to SLA members in a special mailing in Nov 1976. They were reprinted in *American Libraries* 7:610 (Nov 1976).*

*All of the above documents appeared in the Nov 15, 1976 issue of the *ALA Washington Newsletter* which is now available as *The Librarian's Guide to the New Copyright Law*. Copies may be ordered (\$2 each) from: Order Department, American Library Association, 50 East Huron, Chicago, IL 60611. Please enclose check or money order payable to the American Library Association.

COMING EVENTS

Nov 13-16. Allerton Institute . . . University of Illinois, Champaign, Ill. Theme: Improvement of Library Services for Children. Write: Edward Kalb, Conference Coordinator, 116 Illini Hall, University of Illinois, Champaign, Ill. 61820.

Nov 13-18. Effective Use of OCLC, Workshop . . . Kent State University Libraries, Kent, Ohio. Fee: \$325 (covers all sessions, materials, and accommodations). Contact: Anne Marie Allison, Kent State University Libraries, Kent, Ohio 44242.

Nov 15-17. Program Budgeting in Libraries: A Practical Approach, Pre-Conference to 1977 Annual Meeting of Virginia Library Association . . . The Homestead, Hot Springs, Va. Sponsors: Virginia State Library and LSCA Title III Continuing Education Advisory Committee. Contact: Suzanne Shook, Cooperative Programs Librarian, Virginia State Library, 12th and Capitol Sts., Richmond, Va. 23219.

Nov 17-19. Virginia Library Association/Virginia Educational Media Association, Joint Conference . . . The Homestead, Hot Springs,

Va. Theme: Technology, Information, and Society. Write: P.O. Box 12445, Richmond, Va. 23241.

Nov 17-20. "Between Friends," International Conference . . . Niagara Falls—New York and Ontario. Sponsors: New York Library Association and Ontario Library Association. Write: Lucille C. Thomas, NYLA Conference Coordinator, 60 E. 42nd St., New York, N.Y. 10017.

Nov 30. Association of College and Research Libraries Conference notice of intent to submit papers. Completed manuscripts due Feb 28, 1978. The conference will be held in Boston, Mass., Nov 8-11, 1978. Theme: New Horizons for Academic Libraries. Write: Irma Y. Johnson, Charles Hayden Memorial Library, Massachusetts Institute of Technology, Cambridge, Mass. 02138.

Dec 1-2. Patent Documentation and Information . . . The Hague, Netherlands. Sponsor: FID/PD. Contact: F. Schweikhardt, FID/PD Chairman, c/o Robert Bosch GmbH, Postfach 50, 7000 Stuttgart 1, Federal Republic of Germany.

Dec 2. Copyright Workshop . . . Graduate School of Library and Information Sciences,

University of Pittsburgh, Pittsburgh, Pa. Write: William Z. Nasri, GSLIS, University of Pittsburgh, Pittsburgh, Pa. 15260.

Dec 2. Elizabeth Ferguson Seminar . . . YWCA, New York. Sponsors: New York Chapter, SLA and YWCA, City of New York. Topic: A Wealth of Information: A Description of Federal Reserve Publications and Where to Find Them. Fee: \$6. Contact: Tessie Mantzoros, Business Week Library, 1221 Avenue of the Americas, New York, N.Y. 10020.

Dec 13-15. First International On-Line Information Meeting . . . Tara Hotel, London, England. Sponsor: *On-Line Review*. Write: Organising Secretary, *On-Line Review*, Woodside, Hinksey Hill, Oxford OX1 5BP, England.

Dec 15. Computer Networks, Symposium . . . National Bureau of Standards (NBS), Gaithersburg, Md. Sponsors: Institute of Electrical and Electronics Engineers' Technical Committee on Computer Communications and NBS Institute for Computer Sciences and Technology. Contact: Helen M. Wood, NBS, Technology B-212, Washington, D.C. 20234.

Erratum. The dates of the Medical Library Association's 77th Annual Conference are Jun 10-15, 1978—not May 27-Jun 1, 1978, as reported in the September issue of *Special Libraries*.

Control of Environmental Conditions in Museums, Libraries and Archives in Situations of Energy Shortage: An Interim Statement by the National Conservation Advisory Council

In these times of diminishing fuel and power resources, the Nation's museums, libraries, and archives are exploring various means to reduce their overall energy demands without endangering their collections. To this end, special committees have been established both by the American Association of Museums and the National Conservation Advisory Council. The latter organization was established in 1973 to study the needs for preserving the Nation's cultural and historical patrimony—buildings, fine art collections, archeological materials, books, documents, etc.—which tend to deteriorate with time even when provided with

the best of care. In order that trustees and administrators can properly fulfill their obligations to preserve the Nation's cultural patrimony, careful consideration must be given to the requirements for atmospheric control within their structures. A current matter of concern is the possibility of complete interception of power services with little or no advance notice, carrying with it the potential danger that sudden changes in atmospheric environment can result in extensive damage to the collections.

The first and ultimately the major responsibility of museums, libraries, archives, and his-

toric buildings is the preservation of the cultural and historical materials entrusted to their care. To carry out this charge these institutions must exercise a considerable measure of control over the climatic conditions within their buildings—temperature, humidity, and atmospheric pollutants—to minimize the risk of damage and partial or complete loss of rare and irreplaceable items. Even if damage is minimal and reparable, the cost of the necessary treatment will place serious demands on the frequently limited financial resources of these institutions.

Large or rapid fluctuations in temperature or relative humidity can result in cracking, splitting, and warping of a wide variety of materials. Moreover, levels of relative humidity much over 70%, if extended over a day or more, can result in the growth of mold. Thus, the maintenance of both temperature and humidity within prescribed limits is essential to avoid serious and irrevocable damage. A widely recognized environmental standard of year-round conditions needed to avoid serious damage to priceless collections is $50 \pm 5\%$ relative humidity (R.H.) and a temperature of $65 \pm 5^\circ\text{F}$. The maintenance of this environment involves the use of both heating and cooling systems, humidifiers and dehumidifiers, all of which require energy for operation.

Atmospheric pollutants, both chemical and particulate, present additional hazards to preservation. To eliminate these, the modern museums, libraries, and archives employ scrubbers and filters to protect against damage from this source.

The maintenance of stable climatic conditions is considered to be of such importance that most of the newly constructed museum and archival buildings have been especially designed with atmospheric control systems that operate continuously. Although many historic houses and older buildings still do not have advanced systems of atmospheric control because of costs and problems of installation, the dangers of uncontrolled atmospheres remain. The changes that occur under these conditions may not be as dramatic as those that occur in floods and fires, yet day-to-day attrition results in rates of decay and loss that are unnecessarily rapid.

If the evidences of our cultural heritage are to be preserved for future generations, individual responsibilities must be recognized and priorities carefully considered. With this view in mind, the National Conservation Advisory Council has drawn up the following initial guidelines as an aid to those responsible for the care of museum and archival collections.

1) Conditions of temperature and humidity should be kept as *steady* as possible—sudden changes can be disastrous. Only in situations of extreme emergency should the humidity be permitted to vary more than 10% above or below the normal conditions in the institution involved, while temperature should not be permitted to vary more than 5°F above or below the normal level.

2) In situations where adherence to the institution's normal environment within the above limits may become impossible, every effort should be made to maintain the relative humidity within a range of not less than 35% or more than 65% and the temperature within a range of not less than 55°F or more than 80°F . It must be recognized, however, that such fluctuations are likely to result in a certain degree of damage to the collections.

3) In the event that major changes in temperature and humidity unavoidably arise, special efforts must be made to control the *rate* of change so that it will take place only gradually over a period of several days at the least.

4) Certain classes of materials—for example, photographic negatives—may require somewhat different temperature and humidity levels from those described above. Curators responsible for the care of the collections must convey any unusual requirements to the officials concerned with the allocation and control of energy resources.

This initial statement has been prepared by the National Conservation Advisory Council to alert responsible officials to the special requirements of climatic and environmental control in institutions charged with the preservation of the cultural patrimony. The committees of the American Association of Museums and of the National Conservation Advisory Council will continue their efforts to explore ways in which the conditions required for maximum safety of the materials of America's cultural history can be maintained with a minimum expenditure of energy. Hopefully, an increased appreciation and understanding of their individual responsibilities will permit trustees, curators, conservators, and the public officials who allocate energy resources to arrive at the most efficacious measures that can be taken to advance the Nation's ability to preserve its historic and artistic collections for posterity.

Paul N. Banks
Chairman
Library and Archives Committee
National Conservation
Advisory Council

STAFF DEVELOPMENT

Ames, Michael D. / Non-Assertion Training Has Value Too. *Personnel Journal* 56 (no. 7):348-350, 366 (Jul 1977).

Because of their position of authority, managers might be more effective if they are less aggressive. The author describes several situations in which managers are overassertive. Non-Assertion Training involves the development of certain skills: i.e., listening, fact finding, empathy, etc.

Bolton, Elizabeth B. and Luther Wade Humphreys / A Training Model for Women—an Androgynous Approach. *Personnel Journal* 56 (no. 5):230-234 (May 1977).

The authors discuss the traditional forms of training and how they have been used in a discriminatory manner. An historical view of the working woman is presented. The training model presented is one based on needs of the worker and not on stereotyped differences. A program that looks at the attitudes which hinder proper utilization of human resources is also suggested.

Brown, Ralph J. and James D. Somerville / Evaluation of Management Development Programs . . . An Innovative Approach. *Personnel* 54 (no. 4):28-39 (Jul-Aug 1977).

For staff development officers pressed to defend budget requests, this article outlines an approach for quantitatively evaluating the cost and performance effectiveness of management training programs. A four-step measurement control system calls for establishing program performance standards geared to specific objectives; monitoring actual results; comparing actual performance with those established standards; and evaluating and determining corrective actions. These procedures yield an "effectiveness index" by which to measure the success of each program relative to the overall objectives of the department. Model budget worksheets are included for return-on-investment analysis.

Elkins, Aaron / Some Views on Management Training. *Personnel Journal* 56 (no. 6):305-306, 311 (Jun 1977).

The author discusses a study concerning on-the-job application of techniques learned during a management training program. The attitudes of the participants toward training programs and toward the organization influence on-the-job accomplishments.

English, Jon and Anthony R. Marchione / Nine Steps in Management Development. *Business Horizons* 20 (no. 3):88-94 (Jun 1977).

A model is used to describe a formal program for filling an organization's managerial needs through the use of managers developed within the organization itself. Nine steps, from assessing developmental needs, to reevaluation of the process, are discussed. A detailed flow chart is included.

Goodman, David S. / Improving the Quality of Human Performance Through Rational Behavior Training. *Training and Development Journal* 31 (no. 5):44-50 (May 1977).

The goal of Rational Behavior Training (RBT) is "the quality control of human performance." The author goes on to define RBT. Ten irrational ideas commonly accepted are discussed. How one may apply RBT and its benefits are presented.

Howe, William C. / Appraisal Systems Measure On-the-Job Effectiveness. *Administrative Management* 37 (no. 5):26-29 (May 1977).

This is a discussion of evaluation criteria for executive positions which are unique within an organization and includes a list of eighteen criteria accompanied by useful phrases describing various levels of performance for each criteria. The nature and application of performance measurement criteria for executives is briefly discussed.

Howe, William C. / Management Still Must Train. *Supervisory Management* 22 (no. 7):26-30 (Jul 1977).

The author discusses a training program for middle-level managers and first-line supervisors which utilizes "completed staff work technique." It is a type of OJT which involves subordinates in the problem solving process. Success of the program depends on a clear explanation of the problem, how the problem is assigned, and whether the people involved follow the problem solving process.

Jacobs, Arturo A. / What's Wrong With Performance Evaluation Programs? *Supervisory Management* 22 (no. 7):10-15 (Jul 1977).

Because performance evaluations are often used to help identify areas needing staff development, it is imperative that these evaluations are done fairly. The author stresses the need to get away from evaluation of personal traits. Evaluations should be related to up-to-date job descriptions and focused on work expectations.

Jacobs, Frederic and Peter Cowden / The Relevance of Recurrent Education To Worker Satisfaction. *Monthly Labor Review* 100 (no. 4):61-64 (Apr 1977).

A cogent examination of labor's increasing interest in continuing education and training beyond the traditional in-house courses in job-related competencies. The authors argue that future employers will be expected to provide a wide range of educational opportunities as a catalyst for job satisfaction, personal growth and career mobility.

Kilpatrick, James J. / Sweeping Rules on Employing the Handicapped. *Nation's Business* 65 (no. 7):11-12 (Jul 1977).

Editorial comment on HEW's sweeping regulations implementing Section 504 of the 1973 Rehabilitation Act. By extension, the report draws attention to the profound effect these legislated civil rights for the handicapped will have upon every public and private library receiving federal funds. Effective June 1, 1977, §504 states that:

No otherwise qualified handicapped individual . . . shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

Free copies of the 504 Regulations can be obtained by calling HEW's Office of Public Information at 202-245-6700.

Kitson, Harry D. / Training for Personnel Work. *Personnel Journal* 56 (no. 6):271-273, 309 (Jun 1977).

This article which originally appeared in 1937 is relevant today to the need libraries have for trained personnel officers.

Lawler, Edward E., III / Developing a Motivating Work Climate. *Management Review* 66 (no. 7):25-28, 37-38 (Jul 1977).

Rapid societal changes are seen as requiring different approaches from those creating a motivating environment. Among the several approaches suggested are: individualized job design, individualized reward systems, and cooperative labor and management projects.

Levinson, Robert E. / How to Conquer the Panic of Change. *Management Review* 66 (no. 7):20-24 (Jul 1977).

Five guidelines for facing change and reducing apprehensions about impending organizational change are outlined. The guidelines are applicable to the library field, as well as to business.

Lorey, Will / Coaching: A New Look At An Old Responsibility. *Supervisory Management* 22 (no. 5):26-31 (May 1977).

Coaching is defined as a "long-term process of helping an employee develop his judgment, leadership, planning, and problem-solving abilities." The author discusses how one should implement this responsibility. Several factors are applicable to a staff development program.

White, Bernard J. / The Criteria for Job Satisfaction: Is Interesting Work Most Important? *Monthly Labor Review* 100 (no. 5):30-35 (May 1977).

Popular claims that workers seek intrinsically satisfying jobs are buttressed by the widely cited *Survey of Working Conditions*, a 1970 University of Michigan Survey Research Center Study which reported that a representative sampling of U.S. workers ranked interesting work as the most important aspect of employment. Salary considerations were ranked fifth in importance.

Given the startling implications of that study, White questions the validity of its methodology. Reexamining the data using a discrepancy measure, he concludes that job satisfaction rankings vary according to occupational group.

Wilk, Carole and Virginia Coplan / Assertive Training As a Confidence-Building Technique. *Personnel and Guidance Journal* 55 (no. 8):460-464 (Apr 1977).

The authors discuss Assertive Training Programs, skills to be developed and pitfalls to avoid. Special problems of women are presented along with titles for additional reading.

Correction

The ALA LAD PAS, Staff Development Literature Review Subcommittee members are John Mayeski, Barbara Ormerod, Jim Lockwood, and Harry Llull.

REVIEWS

Participative Management in Academic Libraries, by Maurice Marchant. (Contributions in Librarianship and Information Science, Number 16.) Westport, Conn., Greenwood Press, 1976. 260p. \$17.50. LC 76-8740 ISBN 0-8371-8935-7.

Dr. Marchant's research into the effects of management style on library performance are presented in this book. Intensive analysis of the data he collected for his doctoral dissertation in 1967-68 is supplemented with data from a field study conducted in 1972.

The first three chapters focus on the marvels of group decision-making and participative management. Dr. Marchant indicates that the

trend toward more participative management in academic libraries will result in more satisfied workers and improved performance for the organization. This brief introduction to the research results neglects major issues, such as the negative aspects of group decision-making, the critical role of top management, and the influence of faculty status on library effectiveness.

The research results are based on surveys conducted in 22 academic libraries. The surveys covered organizational characteristics (produced by the Likert profile), job satisfaction, degree of planning and management control, and library performance evaluations. The mass of data produced by these surveys was

thoroughly analyzed to produce significant and, in some cases, surprising relationships between the variables. In addition to the complexities of the relationship between participatory management and library performance, the reader will learn that the librarians in this survey were satisfied with their jobs and that there is a gap between faculties' evaluation of libraries and library managers' evaluations.

Happily, Dr. Marchant warns that a statistically significant correlation should not be interpreted as a causal relationship. Unhappily, people who have not had formal training in statistics will have difficulty with this book. Librarians who are comfortable with the language of statistics also will be frustrated because of the necessity to flip pages between the text and appendices. Dr. Marchant has produced valuable insights into the fuzzy field of academic library management; however, the results of his work may not receive the attention they deserve due to poor presentation.

Miriam A. Drake
Purdue University Libraries
West Lafayette, Ind. 47907

NATIS: Preliminary Survey of Education and Training Programmes at University Level in Information and Library Science, by D. J. Foskett. Paris, Unesco, 1976. 149p. Paper.

One of the main objectives of NATIS (National Information Systems) is the provision of "adequate numbers of professional staff to meet the demand for qualified personnel to operate the national information system."

This survey presents a review of the "current position and of some trends in training and education for Information and Library Science at the level of the university or equivalent institution of higher learning."

The survey is based on information received from answers to a questionnaire drawn up and sent out in 1972 by the Secretariat of the FID (International Federation of Documentation) Education and Training Committee (FID/ET) and the Centre for Scientific and Technical and Economic Information (CLINTE) in Warsaw.

It is divided into three parts: 1) Introduction and Commentary; 2) National Survey; and 3) Analysis and Replies to Questionnaire. Part one defines the scope of the survey and deals with such topics as mechanization, courses and curricula, teaching methods, theory and practice. Part two has been compiled partly from the replies to the questionnaire and partly

from information supplied directly by the 13 countries and areas surveyed: Czechoslovakia; Federal Republic of Germany; France; Hungary; Netherlands; Poland; Scandinavia; Iceland; U.K. and British Commonwealth; U.S. and Canada; Latin America; Japan; and U.S.S.R. Canada (11), the U.S. (13), and the U.K. (11) accounted for more than 60% of the total number of replies. Part three was done by J. B. Bukowsky of CLINTE.

The questionnaire itself consisted of 16 major questions concerning the organization, content, and general characteristics of training and education courses in the field of information and library science. It was sent to 72 teaching institutions. Replies were received from 58 of them, and they are listed. Fifty pages cover detailed examples of categories of curricula: 1) theoretically oriented—Georgia Institute of Technology, School of Information and Computer Science; University of Maryland, School of Library and Information Services; and Indian Statistical Institute, Documentation Research and Training Centre, among them; 2) computer science oriented—Cornell University, Department of Computer Science; McGill University, Graduate School of Library Science; and the University of California at Los Angeles, Computer Science Department, fall in this category; 3) the library oriented curriculum—the University of Chicago, Graduate Library School; Polytechnic of North London, School of Librarianship; and the University of British Columbia, School of Librarianship, are included in the list.

What emerges clearly from the survey is the need for improving the curricula to keep pace with the technological changes in the profession to better meet the needs of the information community; also, that most countries are facing the same sorts of problems, and the exchange of information and experience should be a valuable aid in planning for future development.

This survey will be useful to those who are involved in the education and training of librarians and information specialists. It will supplement the earlier and longer works, *Education and Training of Information Specialists for the 1970's*, by Herbert Schur (OECD Report) (Sheffield, Postgraduate School of Librarianship and Information Science, 1972) and *Planning Library Education Programmes*, by John Dean (London, Deutsch, 1972).

Vivian D. Hewitt
Carnegie Endowment for International Peace
New York, N.Y. 10017

PUBS

(77-089) **Proceedings of the Second Annual Government Documents Workshop, June 19-20, 1975.** New York State Government Documents Task Force. Andrews, Michael, Elizabeth Dole and Stephen Torok, eds. Oswego, N.Y., State University of New York at Oswego, Continuing Education Office, 1976. 134 p. \$7.50.

Proceedings of workshop held at the University of Guelph, Guelph, Ontario, Canada. Available from: College Book Store, SUNY Oswego, Oswego, N.Y. 13126.

(77-090) **Health Sciences Librarianship: A Guide to Information Sources.** Basler, Beatrice K. and Thomas G. Basler. Detroit, Gale Research Co., 1977. 186p. (Books, Publishing and Libraries Information Guide Series, vol. 1). \$18.00. LC 74-11552 ISBN 0-8103-1284-0

Annotated bibliography covering recent publications on the theory and practice of health science librarianship.

(77-091) **International Index to Film Periodicals 1975; An Annotated Guide.** Thorpe, Frances, ed. New York, St. Martin's Press, 1976. 511p. \$30.00. LC 72-1964 ISBN 0-900997-34-6

Approximately 80 periodicals are indexed.

(77-092) **San Diego Area Library Directory, March 1977: San Diego Libraries and Librarians, Interlibrary Loan Plan and Procedures.** San Diego County, Dept. of Education, Superintendent of Schools. San Diego Instructional Resource Center, 1977. 52p.

Alphabetical listing of county, municipal, college, university, special, and school libraries.

(77-093) **The Variety of Librarianship; Essays in honor of John Wallace Metcalfe.** Rayward, W. Boyd, ed. Sydney, Library Association of Australia, 1976. 242p. \$15.95. ISBN 0-909915-42-3

Compilation of essays available from: Library Assn. of Australia, The Science Centre, 35 Clarence St., Sydney NSW 2000.

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